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ABSTRACT

The study reported here was performed to develop the Productivity Measurement System (PMS), a method for measuring the productivity of State employment service agencies (SESA) that utilize other productivity measures besides placements, which is the measure used in the current system, Research Allocation Formula (RAF). Chapter 1 covers the purpose and background of the study and organization of the report. Chapter 2 presents an overview of PMS and discusses the structure of the PMS model, input and output measures, weighting and aggregating model components, and model implementation and application considerations. Chapter 3 discusses input measures and includes classification of input measures, data sources, and allocation of managerial and administrative functions. Chapter 4 discusses the system's output measures and includes the definition and classification of the measures, data sources, and the process for assigning values to outputs. Chapter 5 explains the framework for model component aggregation and weighting. Chapter 6 contains a demonstration of PMS based on the results of pilot studies and describes the structure of SESA services; applicant, employer, and agency data; and the methodology for model operation. Chapter 7 discusses requirements for implementing PMS as an ongoing system. An extensive appendix contains supplemental data source information and the pilot study design. (EM)

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SESA PRODUCTIVITY MEASUREMENT SYSTEM

Final Report

Measuring the Productivity
of the State Employment Service Agencies

Prepared for:

U.S. Department of Labor
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The study described within this report was performed to develop a method for "Measuring the Productivity of State Employment Service Agencies". The purpose of the research was to identify outputs resulting from ES treatments; to develop procedures for quantifying them and to develop a procedure for combining and weighting all quantifiable outputs in order to arrive at an overall measure of productivity.

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1.0 INTRODUCTION

1.1 OBJECTIVES

The purpose of this final report is to present the Productivity Measurement System (PMS) for State Employment Service Agencies (SESA). The system as presented represents an effective and feasible means for measuring SESA productivity.

The productivity measure currently used by the Research Allocation Formula (RAF) is placements. The purpose of the PMS is to identify and weight additional measures of productivity in an effort to better define the output of SESA. A measure which considers, along with placements, additional measures of productivity will serve as a better reference point from which to allocate agency resources. It will also serve as a more reasonable basis for comparison of performances across state or local offices and will better assist in identifying where particular emphasis may be exerted to improve specific operations.

1.2 SCOPE

The system is designed to address the Employment Service operation as one which has expressed goals. Since the key to the relative importance of one activity as compared to another is the weight placed on the output of that activity by the agency, the system will only be effective to the extent that the agency can define what it wishes to accomplish. From this perspective the implementation of the PMS itself may be viewed as a positive management goal, that is, a stimulus to the better definition and achievement of agency objectives.

Given that the objectives, as defined, are accurate and adequate and that the weighting process acceptably reflects USES priorities, the PMS is an accurate representation of the production of SESA operations. Within the PMS the relationship of inputs to outputs is established

directly, and outputs are related to objectives by first defining a quantitative measure of each output and by subsequently assigning equitable weights to the quantitative measures.

1.3 BACKGROUND

The USES currently employs as a basic productivity measure various combinations of placement "success" as computed by the RAF. Because of several weaknesses within this current formula it has been argued that some states, particularly those serving large urban areas, are not receiving an equitable share of the total Employment Service resources. There have been extensive studies of this problem, attempting to clearly identify the RAF inequities. Some studies have been commissioned by USES and some by the states themselves. Most notable among these studies are those by E.F. Shelley[1/] (USES) and by Dr. Fred Englander (State of New Jersey).[2/] Findings and recommendations from these studies generally indicate that the current system is inequitable and requires modification. Modifications such as those suggested within these studies are generally constrained by the nature of the RAF— that is, although the two studies were initiated to examine the RAF, both studies limited their recommendations to the realignment of resource allocations within the basic RAF framework.

The RAF, however, has the underlying problem of only crediting SESA's with a portion of their productive effort. Labor exchange activities short of placement, legislated activities, and other SESA functions clearly aligned with the basic agency objectives are not considered within the formula. Since these additional efforts are performed unevenly among the various offices, a measure of the output of such activities must be integrated into the basic allocation formula if it is to be made equitable.

1/ E.F. Shelley and Company, Incorporated, Handbook for Analyzing Local ES Performance, Volume 4 (August 1, 1975.)

2/ F. Englander, Ph.D., An Evaluation of the Allocation of Funds Among State Employment Service Agencies (New Jersey Department of Labor and Industry, 1975)

The premise for the development of the PMS, therefore, was to devise a measure of productivity which is sensitive to the outputs of the total spectrum of SESA activities.

1.4 STUDY RESULTS

The PMS has been developed as a complete model. The study activity over the past twelve months has served to:

- identify an acceptable set of agency objectives,
- define the operation in a production model format,
- define the outputs of the agency activity,
- define the system inputs to the agency activity, and
- relate the outputs to agency objectives.

The problem of weighting outputs has been addressed through the development of specific application examples of production models within this report. The desired weighting for each output must ultimately be established by USES for the system to be considered "operational".

The system was given a limited test in two states. As a result of these tests, the following refinements were made to the basic model.

1. A specific level of detail suitable for measuring inputs and outputs was selected based on the availability of data.
2. A specific measurement plan for input data was developed.
3. A sampling plan was developed for the collection of output frequency data.

4. A specific plan was developed for the assignment of values to SESA outputs.

5. The technique for weighting individual productivity ratios was finalized.

6. A detailed and specific pilot test plan was developed.

1.5 ORGANIZATION OF THIS REPORT

The material in this report is organized into seven chapters. This chapter, the Introduction, reviews the purpose and background of the study and discusses the organization of the report. Chapter 2 presents a concise overview of the SESA Productivity Measurement System and includes a review of the Productivity Model structure, the technical considerations involved in its construction, the input and output measures that it utilizes, and other relevant aspects of the system. Chapter 3 consists of a discussion of the measures of resource inputs that constitute the "denominator" of the productivity equation developed in the system. This chapter includes a discussion of how the input measures are classified, what data sources are used, and how managerial and administrative functions are allocated.

Parallel to Chapter 3, Chapter 4 discusses the measures of SESA output used by the system. This chapter includes the definition and classification of the measures, the data sources utilized, and a discussion of the process of assigning values to SESA outputs. Chapter 5 pulls together the various components presented in other parts of the report and discusses the combining and weighting technique. Chapter 6 contains a demonstration of the PMS based on the results of the pilot studies. Chapter 7 discusses the requirements for implementing the PMS as an ongoing system.

2.0 OVERVIEW OF SESA PRODUCTIVITY MEASUREMENT SYSTEM

2.1 INTRODUCTION

An overview of the SESA Productivity Measurement System is presented within this section. The discussions are designed to be as brief as possible yet to provide a complete overview of the system. While relevant issues are addressed, detailed discussions and justifications for choosing between alternative approaches have been omitted from this chapter. Specific supporting detail can be found in later chapters of this report.

Included in this chapter are discussions of the structure of the model, the various input and output measurement details, the methodology for weighting and combining model components, and significant implementation considerations.

2.2 THE STRUCTURE OF THE MODEL

The SESA Productivity Measurement System uses the basic structure of the production function, relating the resources consumed in the production of each "product" produced by the "firm" to the volume of outputs produced. The "firm" in this case is the individual SESA agency, and the "product" is a complex package of services that result from SESA activities. Defining the product as the sum of services or outputs resulting from SESA activities or inputs, then:

$$\text{Productivity} = \frac{\text{Outputs}}{\text{Inputs}}$$

The specification of the measures of SESA inputs is a relatively straightforward task. Inputs include the amount of SESA staff time devoted to each activity, and the amount of SESA resources devoted to

capital equipment, supplies, and other non-personal services. The process of detailing the measures of input in the production function is relatively uncomplicated.

Measuring the outputs of SESA agencies is a more formidable task. For SESA outputs, four categories of outputs are recognized. They include:

- applicant process outputs,
- employer process outputs,
- placement process outputs, and
- legislatively mandated process outputs.

Weights assigned in the aggregation of the four categories of outputs are subjective and must be established through interaction between the individual SESA and USES. Weighting considerations must include overall program objectives, agency objectives, and external variables at the operational level. The weights given to the four components in the aggregation process must also be influenced by the purpose for which the PMS is to be used, be it a productivity/time comparison of an individual cost center, an intrastate productivity comparison of similar cost centers, or an interstate productivity comparison of individual SESA's.

The entire process of performing SESA services can be defined as a function of the four individual components,

$$P = K_1 \frac{\Sigma O_i}{\Sigma I_i} + K_2 \frac{\Sigma O_j}{\Sigma I_j} + K_3 \frac{\Sigma O_k}{\Sigma I_k} + K_4 \frac{\Sigma O_\ell}{\Sigma I_\ell}$$

where

P = Productivity measure,
$K_{1,2,3,4}$ = Weighting of components (policy weighting),
O_i = Applicant process outputs,
O_j = Employer process outputs,
O_k = Placement outputs,
O_ℓ = Legislatively mandated process outputs, and
$I_{i,j,k,\ell}$ = Respective inputs.

Input can be determined by valuing the amount of time or other resources spent for a specific activity. Output can be determined by an objective measurement of applicants and employers before and after SESA services are rendered, based on a determination of the value of the services provided, in terms of dollars or a suitable proxy measure. The aggregation of individual productivity components is based on a weighting of the component according to the desired emphasis by USES or according to specific external considerations. Input and output measurements and component weightings are discussed in more detail in Chapters 3, 4 and 5.

2.3 INPUT MEASURES

Considerable data describing both time and cost expenditures is currently available within the SESA system. Difficulties arise in maintaining the identity of inputs organizationally and functionally when relating them to the specific outputs. Recognizing that the existing SESA structure placed limitations on the conceptual framework for the model, the study team set it aside and developed a structure solely for the requirements of the model.

In the model inputs are classified according to activities, where activities are defined as a segment of the SESA program consisting of related treatments, services, or internal work products generated by agency work. These activities are further divided into subactivities to reflect a more specific work product level.

The entire spectrum of SESA activities is organized into three basic functional areas. These include:

- Labor Market Exchange (LME) functions which are client specific,
- LME functions which are non client specific, and

- non LME functions.

Activities are then classified by the "client" toward which the activity is directed: applicants, employers, community/industry, or other agencies. Such classifications facilitate handling various input activities within the model framework. In total, over 110 separate activities are identified. These activities are shown in Appendix A of this report.

The other significant consideration in the development of an input measurement system concerns the actual units of measure. Available alternatives include the measurement of manhours, equivalent positions, dollar costs of personal services, and dollar costs for all services. Examination of these alternatives indicates that the use of dollar costs for all services as the input unit of measure is best suited for the model. A discussion of the impact that the use of these alternative measurement units would have on the PMS is included in Chapter 3.

2.4 OUTPUT MEASURES

The development of the output measures for the model employs a "valuation" technique. In the "valuation" technique a subjective system of measurement is utilized in order to "assign" a value for a specific service rendered to a recipient based on the relationship of that service to other services within the SESA structure.

The conceptual framework of the valuation approach used in this application is one which compares the individual to raw material entering into a production system which has multiple outputs. As a basic "raw material" the individual applicant (or employer) has an identifiable value when entering the system. This value will vary based on relative employability (or propensity to enter a job order). Movement through

the "production process" presumably will change this value. Because the point at which the individual will drop off is unknown, the measurement system must be capable of developing a value for treatments provided based on the increased marketability of the individual (or increased propensity to enter a job order) after treatments have been provided.

The usefulness of treatments provided to an applicant by the SESA are viewed as being provided along a spectrum, at one end of which are individuals with no skills, while at the opposite end are individuals who are fully job qualified. For example, the only productive treatment that is provided to fully qualified individuals is job placement. For other individuals an ever increasing range of activities can be provided as they move toward the "no skill" section of the scale.

A similar treatment for employers is based on the familiarity of the employer with the SESA operation. Using this concept, more credit is awarded for job placements which required initial basic "selling" by the SESA office. Credit is also provided for the development of job openings from particular employers even in cases where the jobs went unfilled.

The "valuation" technique is also applied to those services rendered outside of the normal production cycle, for example, the task of placing clients or of matching jobs. These services must be arrayed and ordered according to a subjective determination of their value to USES. The validity of such determinations, while subjective in nature, can be supported by employing such techniques as "DELPHI"[3/] in which an evaluation is made by a group, and is systematically narrowed, based on alternative rankings by the group in order to arrive at a consensus of opinion.

3/ DELPHI produces concensus by requiring that an evaluation be conducted through various stages, while feeding back interim results to the evaluators. This technique does not require that evaluators participate as a group, thus SESA managers can participate in the value development and increase their propensity toward acceptance of the system. See Andre L. Delbecq, Andrew H. Van de Ven, and David H. Gustafson, Group Techniques for Program Planning (Glenview, Illinois: Scott, Foresman and Company, 1975.)

The system of valuation eliminates the possibility of double-counting SESA outputs by using a cumulative measurement system. This means that when an applicant enters the system with an employability rating of 10 and is provided with SESA services to raise him to a job-ready level, he emerges as a job-ready individual with an employability rating of 25. Whether or not he takes a job for which he is matched, the net value added by the agency in his case is 15, (his final rating of 25 minus his initial rating of 10). Since an agency supplies to an individual the services he requires (as reflected in his initial employability score), and since the person's initial (entering) employability score is deducted from his final score, the possibility of double-counting SESA outputs is eliminated. The same case may be made for valuing employer services.

Since the most difficult task in the Productivity Measurement System is the treatment of the process outputs, it is appropriate to discuss such outputs in greater detail.

2.4.1 Applicant Process Outputs

Applicant Process Outputs are SESA outputs that affect the employability of an identifiable individual and which contribute to the economic value of that individual to an employer. A SESA client is assessed as having a certain value to an employer when he enters the SESA office and is judged to gain employment value as a result of receiving SESA services.

A number of different scaling techniques can be used to assess employability. For example, a scale that measures client employability might include an assessment of such variables as language difficulties, legal barriers to employment, work history and outlook, transportation, and child care needs.

Conceptually, a client enters the system and is "rated" at whatever score his current level of employability attains on the rating scale adopted. The lowest score, zero, is assigned to a client who has none of the desired employability attributes and who has not been afforded any SESA services. The highest point attainable on this scale is that of a job-ready individual, one who possesses all of the desired employability attributes and/or who has received all of the relevant SESA services.

2.4.2 Employer Process Outputs

Employer process outputs are those services provided by a SESA that enhance the movement of an employer toward the entry of a job order to a SESA office. Any SESA activity that can be seen as encouraging the solicitation, identification, classification, or delivery of an eventual employer job order is included in this output category.

These employer process outputs can be measured by using an approach similar to that used for SESA applicants. At one end of the measurement spectrum is an employer who has no awareness of SESA services and who has no contact with the agency. At the other end is the employer who has identified an employment opportunity and who has entered a job order with SESA. The application of relevant services to an employer gives additional "value" to that employer in the sense that it moves him closer to the point of being able to enter a job order. The specific scaling of the value of each activity must assess the state of employer awareness at the outset, measure the value of the needed services, and determine the net value added to that employer as a result of SESA service provision. Again, the highest point attainable in this class of outputs is the entry of a job order by an employer.

2.4.3 Placement Process Outputs

Placement process outputs are those services provided by a SESA that attempt to match, or achieve a match, of a job-ready applicant to an employer job order. Thus, any SESA activity that can be classified as the screening of applicants, the referral of applicants, the establishment of contacts for arranging interviews, or the like is included in this output category. Placement activities result from matching a job-ready individual to a job order. The identification of an individual who matches a job falls on one end of the scale, while verification of job placement falls on the opposite end.

2.4.4 Legislatively Mandated Process Outputs

This category consists of SESA activities that are mandated by legislation but which do not directly relate to the placement functions. Thus, for example, the function of making alien or immigrant certifications is assigned a value using a numerical measure developed specifically for this function.

2.4.5 A Schematic Illustration of the Output Measures

Exhibit 2-1, on the following page, presents an illustration of the SESA Productivity Measurement System as used with hypothetical values for each category of SESA outputs. (The values shown have been selected for illustrative purposes only and can be set at any level consistent with ETA policy goals.) These values are:

Process	Outputs	Value	Range
1	Applicant Process Outputs	25 Points	0-25
2	Employer Process Outputs	25 Points	26-50
3	Placement Process Outputs	30 Points	51-80
4	Legislatively Mandated Process Outputs	20 Points	81-100
	Total Available	100 Points	

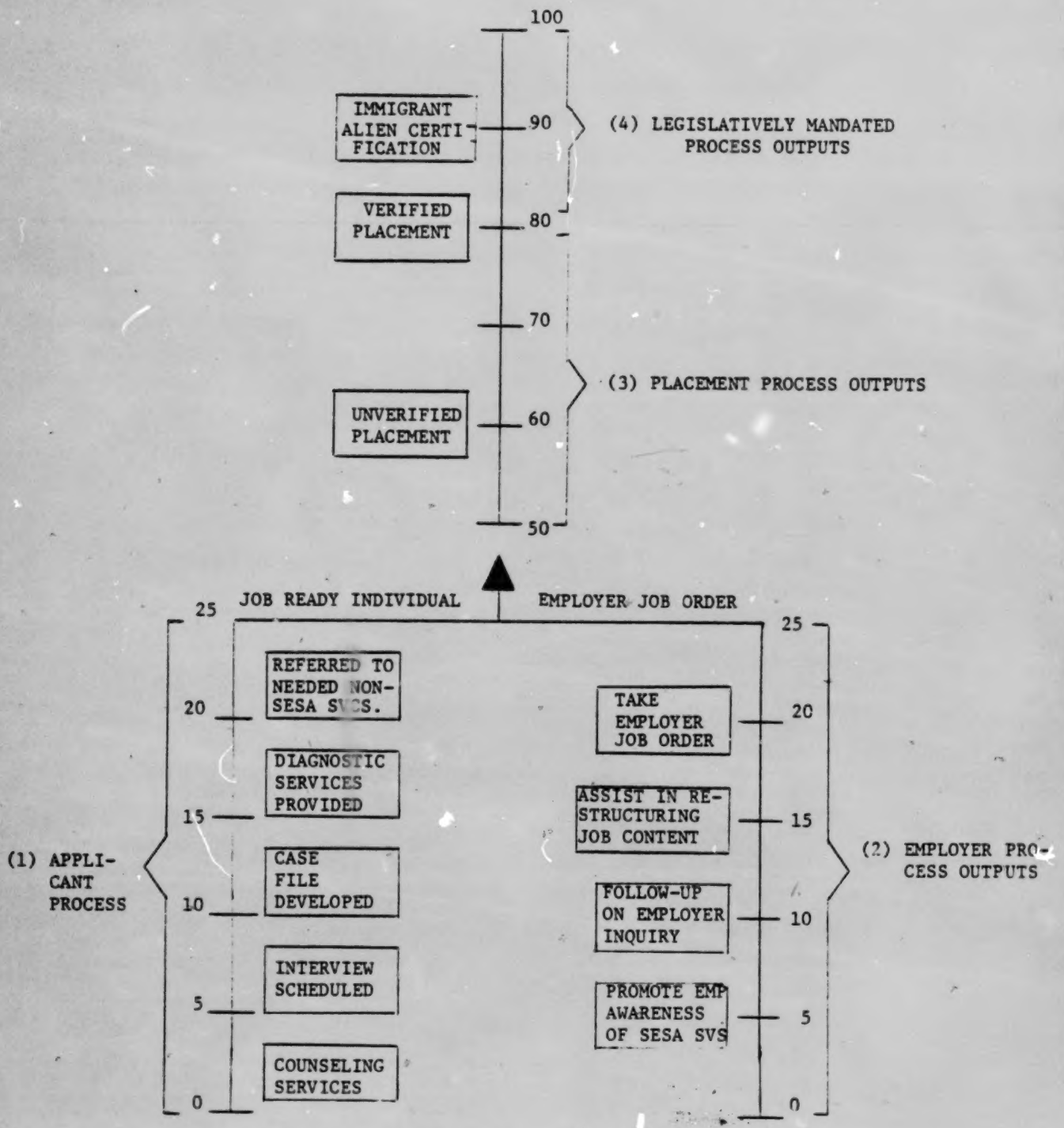


Exhibit 2-1. Schematic of Output Valuation Scale

As can be seen on the left side of the exhibit, an applicant can have any of several relevant services supplied (Exhibit 2-1; (1) Applicant Process Outputs) and can progress along the continuum from any point -- 0 for an unqualified person or (perhaps) 10 for one who is more employable -- to 25, which is the score that represents a job-ready individual. Parallel to this process, services can be supplied to employer such that they progress along the continuum pictured on the right side of the schematic (Exhibit 2-1; (2) Employer Process Outputs). The highest point along this scale occurs with an employer job order. These two series of SESA outputs come together with the placement outputs (Exhibit 2-1; (3) Placement Process Outputs). This is represented in the upper center portion of the schematic, and is scaled from 50 points to 80 points, i.e., 30 points in this example are awarded to each agency for each verified placement. The remaining 20 points represent the legislatively mandated functions (Exhibit 2-1; (4) Legislatively Mandated Process). These are measured independently of the other outputs and, although they are displayed on the same schematic, they do not necessarily follow in sequence to placements.

2.4.6 Measurement of Frequency of Output

Having identified specific values for each SESA activity performed, it is necessary to identify specific frequencies for these activities over a period of time. The two overriding considerations are the identification of a specific workload item and the ease in obtaining the count.

The identification of a specific workload item is often a difficult task. For example, Employer Outreach Activities are an important first step in obtaining the job orders necessary for placements. However, many outreach activities utilize mass techniques in which no specific employer-SESA interaction takes place. Identification of a specific output unit from such activities is impossible, while they do involve intermediate outputs which impact on later operational activity. Thus,

the value of their outputs can be subsumed in a later terminal output. For example, "employer inquiries" might be a logical terminal output for most outreach techniques. Other situations are not as difficult, however. A logical unit of measure for counseling is "clients counseled". The frequency of output multiplied by the value of the output may be used to express the total value for that output over a period of time.

The other consideration in measurements of frequency of output is the ease in obtaining the count. In establishing any system today, the potential automation of data retrieval must be considered. A model, no matter how sensitive, which is labor intensive in its operation may not be so successful as a less sensitive but more highly automated system. The investigation of existing systems which measure SESA outputs included an examination of ESARS, state production report systems, and other sources. The specific measures selected use a combination of existing and newly established counts. In total, 47 measures have been selected, of which 26 are from existing sources. A more detailed discussion of the considerations and alternatives leading to the selection of the output structure is found in Chapter 4 of this report.

2.5 WEIGHTING AND AGGREGATING MODEL COMPONENTS

The structure for the productivity model was introduced earlier. Such structure is necessary in order to scale the relationships of the activities within the four components: applicant processes, employer processes, placement processes, and legislatively mandated processes. The assignment of points within these components, in turn, assigns a value for each component. It is desirable, however, to have a method which allows SESA administrators or USES to weight each component in order to alter the value of the components to reflect the program emphasis or to facilitate the particular application of the model.

A significant justification for altering the weights of the model components is to adjust for "external variables". External variables can be those specific economic conditions in which a SESA must operate. Altering component weights allows the SESA to adjust for specific conditions and to place emphasis on particular programs. For example, an external condition of low job availability might make it advantageous to increase the weight of the employer process productivity component in order to increase the value for new job development. Conversely, high employment might make it advantageous to increase the weight for the applicant process productivity component to add emphasis for applicant employability development.

The selection of the weights for the model components can become a part of the budget process in which various SESA's tailor their budgets to produce program emphasis in specific areas and negotiate weights for the model. The model can later be used to monitor performance.

A more detailed presentation of the technique to combine and weight productivity ratios is found in Chapter 5. An example of this technique is shown in Chapter 6.

2.6 IMPLEMENTATION OF PMS

The SESA Productivity Model System as developed provides a system which can be implemented at the lowest SESA cost center level with a minimum amount of effort. A necessary step in developing a system suitable for implementation throughout the SESA system was to conduct pilot tests in two states. The states were selected for the tests in order to comprise an acceptable range of characteristics including agency structure, economic and demographic characteristics, and other significant variables. Results of the pilot tests and the necessary adjustments to the model are discussed in Chapter 6.

Prior to implementation of the PMS, it is necessary to specify the techniques of data collection to be utilized and to develop a specific work plan for the collection efforts. Work measurement techniques such as work sampling, time ladders, and job tickets are utilized in the system to measure the amount of effort spent on the various SESA activities. Also, existing and newly established workload counts and sampling techniques are used to identify the output units. These techniques are incorporated into an implementation guide for the pilot testing of the Productivity Measurement System.

2.7 MODEL APPLICATIONS

The conceptual framework of the SESA Productivity Measurement System (PMS) seeks to incorporate several specific features which could greatly enhance its application in SESA operations. These features include the maintaining of the integrity of SESA functions and cost centers and the separation of the major areas of SESA and USES emphasis. This allows the SESA PMS to be utilized in several unique and significant ways. Alternative uses are discussed below.

Maintaining the functional integrity of the model permits SESA and USES program analysts to utilize segments of the model to identify specific problem areas in which productivity is outside the norm. Since the model is designed for applications both internal and external to the agency, analysts can also track productivity against time, by function, for an agency. Furthermore, productivity can be compared between similar agencies, since their functional variations can be isolated.

Maintaining the cost center integrity of the model allows SESA and USES program analysts to utilize segments of the model to identify additional specific problem areas. By tracking functional productivity by cost center and making comparisons of time series data or similar cost center data, specific problems can be identified.

The separation of major areas of SESA and USES emphasis allows the model to be utilized as a tool during the budget development process. It can also serve as a means by which performance against that budget can be monitored. It is well known that various SESA's feel their unique situation accounts for the variations in the level of output when expressed in terms of the inputs. While a rural area might have little difficulty in maintaining 200 placements per man-year, a highly urban area might find it difficult to place individuals at one half that rate. PMS can be a useful tool in establishing realistic and meaningful goals for an agency, since it can be tailored to the specific conditions under which the agency operates. In an agency where the placement ratio is low with sufficient justification the agency could negotiate a productivity objective for placements which is realistically attainable through good management and which is acceptable to both USES and the agency. This can be achieved through an adjustment of the policy weights in the model to a weighting which places less emphasis on the placement process for the agency and more emphasis on employer processes. This shift of emphasis would not reflect a shift of resources, i.e., the agency would continue to strive for placement, but rather a recognition that the placement ratio in that agency is not comparable to that of other agencies. The modification of placement objectives is akin to the change in objectives recently suggested by both the Shelley and Englander studies cited earlier. However, the structure of the PMS provides a more realistic framework within which to make such changes than that offered by the RAF.

The option of negotiating policy weights allows the setting of a realistic goal for the agency. For example, an agency with an historical ratio of 100 placements per man-year might set a goal of 120. Through negotiation with USES this might be raised to 140. Productivity can then be monitored throughout the year and the agency administrators, having participated in the setting of the goal and feeling the goal is attainable, will have a realistic objective toward which they can apply their

management skills. This sytem can be applied internally as well. SESA administrators can set specific goals for cost center managers through the negotiation process. In turn, performance against the goal can be measured, and appropriate action taken.

3.0 INPUT MEASUREMENTS

The SESA productivity model must include, as one of its basic components, a means of identifying and quantifying those SESA inputs which result in a given product. ASD did not constrain the definition of inputs to fit the framework previously defined for SESA activities. The most notable existing framework is that of the SESA Accounting System, the functional activity codes.

Other structures were evaluated for use in the PMS as well. Although four of the six structures considered were outgrowths of existing systems or systems proposed to USES in the past, two new alternatives were developed for this study. The structure of the two new alternatives is discussed first, followed by a general discussion of all six alternatives. The rationale for choosing the particular structure selected as a result of this study is presented in Chapter 6.

3.1 ACTIVITY AND SUBACTIVITY INPUT STRUCTURES

Before discussing alternative classifications of SESA activities it is appropriate to define several frequently used terms.

- Activity: A segment of a program consisting of related treatments, services, or internal work products generated by agency work; for example, counseling services.

- Subactivity: A subcategory of corresponding activities that reflect a more specific work product level.

Utilizing these definitions, activities were categorized into three basic functions:

- Labor Market Exchange functions which are client specific,
- Labor Market Exchange functions which are non client specific, and
- Non Labor Market Exchange functions.

Next, the activities were segregated into subfunction classifications according to the "client" toward which the activity is directed. Four basic clients were identified:

- Applicants,
- Employers,
- Community/Industry, and
- Other Agencies (Non SESA).

It is our feeling, based on field experience and on an analysis of legislation, that the applicant specific and employer specific labor market exchange functions represent the major focus of SESA efforts. As a practical matter, it is within the area of Applicant/Employer services that the SESA can be most effective. For the above reasons, these activities represent the most familiar process on which there is comparative role agreement and a clearly defined process flow. As a result it is within this area that the most detailed descriptive information may be found. This conclusion has been verified through field visits as well as through further study of Time Distribution information, POSARS and ESARS. A typical distribution of time for a local office and central office is shown in Exhibit 3-1. In using our model for analysis we found that the vast majority of all SESA activities and resources are applied to Applicant/Employer services. Thus, it is essential that the model adequately define productivity in these areas.

Code	Description	% of Total Time Charged	
		Local Office	Total Agency
511	Input Activities	36	26
512	Counseling	4	4
513	Testing	6	3
514	Other	-	-
520	Training, Selection, Referral & Follow-Up	-	1
531	Employment	45	35
551	Employer and Union Services	2	4
552	Employer Technical Services	-	-
553	Immigration Activities	-	2
554	Community Services	1	2
561	Labor Area Information	-	4
565	Test Development	-	1
610	Mgmt & Supervision - Local	5	13
620	Staff Technical Services - Local	1	-
630	Career Dev & Training - Local	-	-
611	Mgmt & Supervision - Central	-	4
621	Staff Technical Services - Central	-	1
631	Career Dev & Training - Central	-	-

Exhibit 3-1. Typical Distribution of Time
Employment Security Administration
Virginia Employment Commission

Within the SESA labor exchange functions, there is a logical flow of activity which begins with applicant/employer outreach and terminates upon verification of job placement and follow-up. The basic flow of activity is summarized in Exhibit 3-2, following this page.

The flow chart indicates that both applicants and employers engage in parallel activities, beginning with outreach, and that they are subsequently brought together by the matching process. Note that many of the activities which appear to fall outside of the labor market exchange function area are included in this description. For example, preferential treatment activities (Employability Development), employer technical assistance, and enforcement functions (Mandatory Listing) are included since they each move ultimately toward a job match or placement "output".

We have identified and cataloged all SESA activities, without regard to current USES classifications, e.g.,community service or preferential treatment. The activities are first organized according to primary functional focus, e.g., Labor Market Exchange Client Specific, and then according to client group, e.g., Applicant or Employer. This approach is used to permit an orderly pairing of activity/outputs with related objectives and, ultimately, to place values on the described outputs according to policy and "effectiveness" (judgmental) considerations.

The activities/outputs are identified and organized as follows:

1. Client-Specific Labor Market Exchange Functions

   - Applicant Process
     - Outreach
     - Intake
     - Diagnostic Assessment
     - Employability Development Resource Mobilization
     - Employability Development

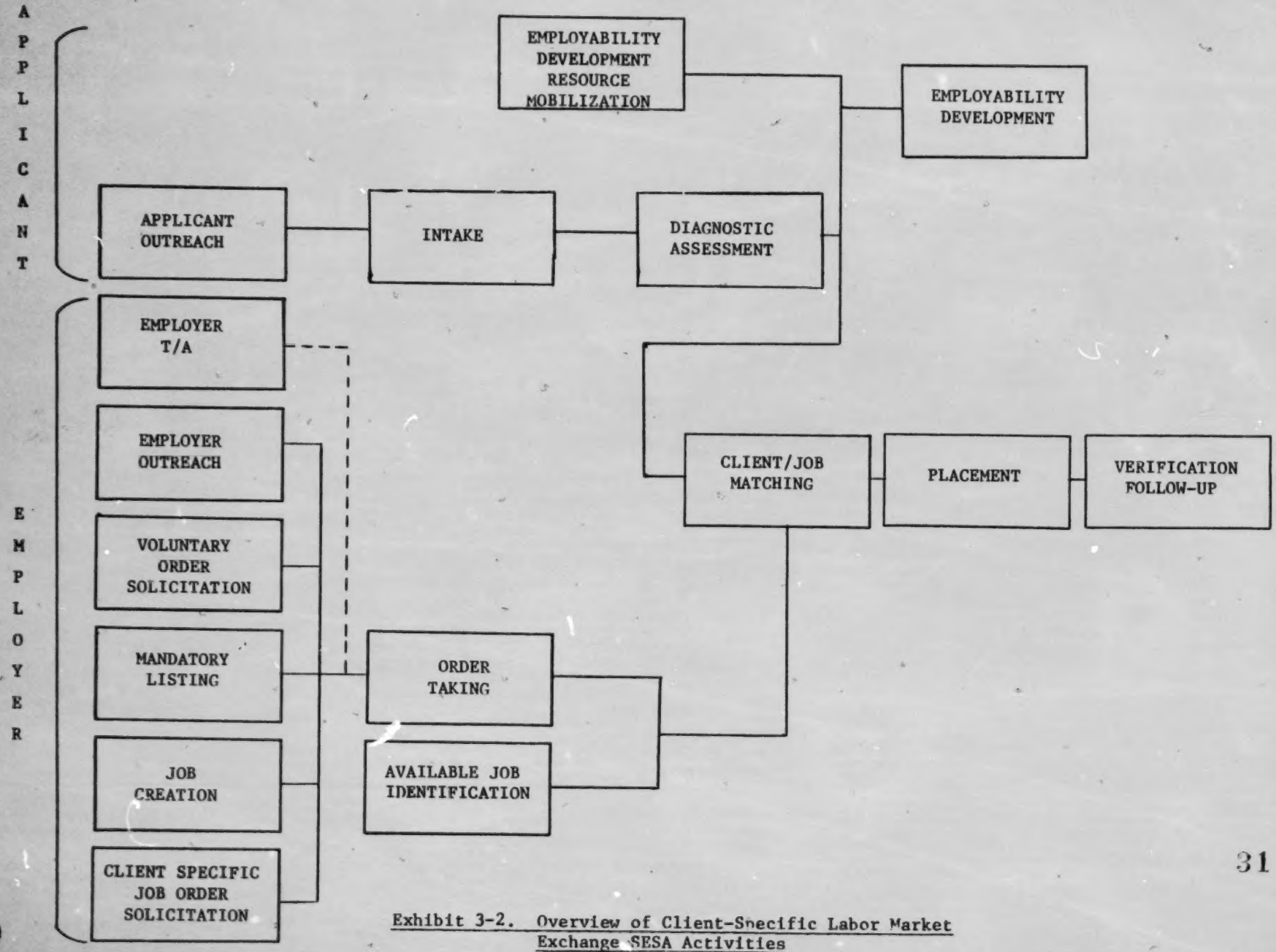


Exhibit 3-2. Overview of Client-Specific Labor Market Exchange SESA Activities

- Employer Process

  - Outreach
  - Voluntary Order Solicitation
  - Mandatory Listing
  - Job Creation
  - Farm Labor
  - Job Identification
  - Client Specific Job Order Solicitation
  - Order Taking
  - Employer Technical Assistance

- Job Matching Process

  - Job Matching
  - Verification/Follow-up

2. Non Client Specific Labor Market Exchange Functions

   - Labor Market Information
   - Farm Labor Wage Survey

3. Non Labor Market Exchange Functions

   - Employee Protection
   - Farm Labor Protection
   - Foreign Trade Act
   - Employer Complaint (SESA Services)
   - Immigration/Alien Certification
   - Learner Certificate
   - DMP #4

This listing catalogs SESA activities. The activities are divided into subactivities. In all, over 110 separate subactivities were initially defined.

The detailed activities and subactivities of SESA inputs make up an impressive and formidable listing. These are shown in Appendix A.

This listing contains a more encompassing group of functions than can be reasonably handled within the context of this model. There are multiple levels of detail which can be utilized, ranging from those just defined to the aggregation of all SESA inputs into a single value. The selection of the appropriate level of detail involves, in part, a consideration of what is actually feasible and a determination of the level to which the "production/cost ratios which reflect how ES resources are being allocated" (a basic study objective) are to be applied. At one extreme, it is desirable to maintain a minute level of detail in order to determine production/cost ratios for subactivities as small as work certifications. At the other extreme, a single, aggregated production/cost ratio based, for example on placements is desirable. Realistically, the model must define some middle ground which can be further aggregated to a single ratio but which reflects ratios at a low enough level to allow "management" of resources within functional areas.

3.2 ALTERNATIVE CLASSIFICATIONS OF SESA ACTIVITIES

There are six definite levels of detail which can be applied to the model. The specific alternative intake structures include the following:

- A single measure of input derived as an aggregation of all inputs to the SESA (Alternative I). This structure is at the same level as that of the Resource Allocation Formula.

- The functional code structure currently utilized in the SESA accounting system time distribution subsystem at the broad band level (Alternative II). This structure is the same as what is currently available through cost accounting.

- The functional code structure currently utilized in the SESA accounting system time distribution subsystem at the detail band level (Alternative III). This structure is the same as what is available through POSARS.

- A new functional code structure based on and compatible with the SESA accounting time distribution subsystem, but at a subdetail band level (Alternative IV). This structure is similar but slightly modified from that proposed by E.F. Shelley and Company.

- A new code structure based on the activities defined according to the structure described in Section 3.1 (Alternative V). This structure is entirely new.

- A new code structure based on the subactivities defined according to the structure described in Section 3.1 (Alternative VI). This structure is entirely new.

The relationships of these structures is shown in Exhibit 3-3, on the following page.

The selected system need not encompass all SESA activities. In fact, a logical rationale exists for the selection of only those activities which can be readily affected by management and thus can be used to assist in "improving efficiency and allocating resources". For example, "employer outreach activities" can be affected by prudent management through the use of more efficient methods, while the handling of complaints concerning SESA services is sensitive to personal contact and may not be a candidate for improvement through more efficient methods.

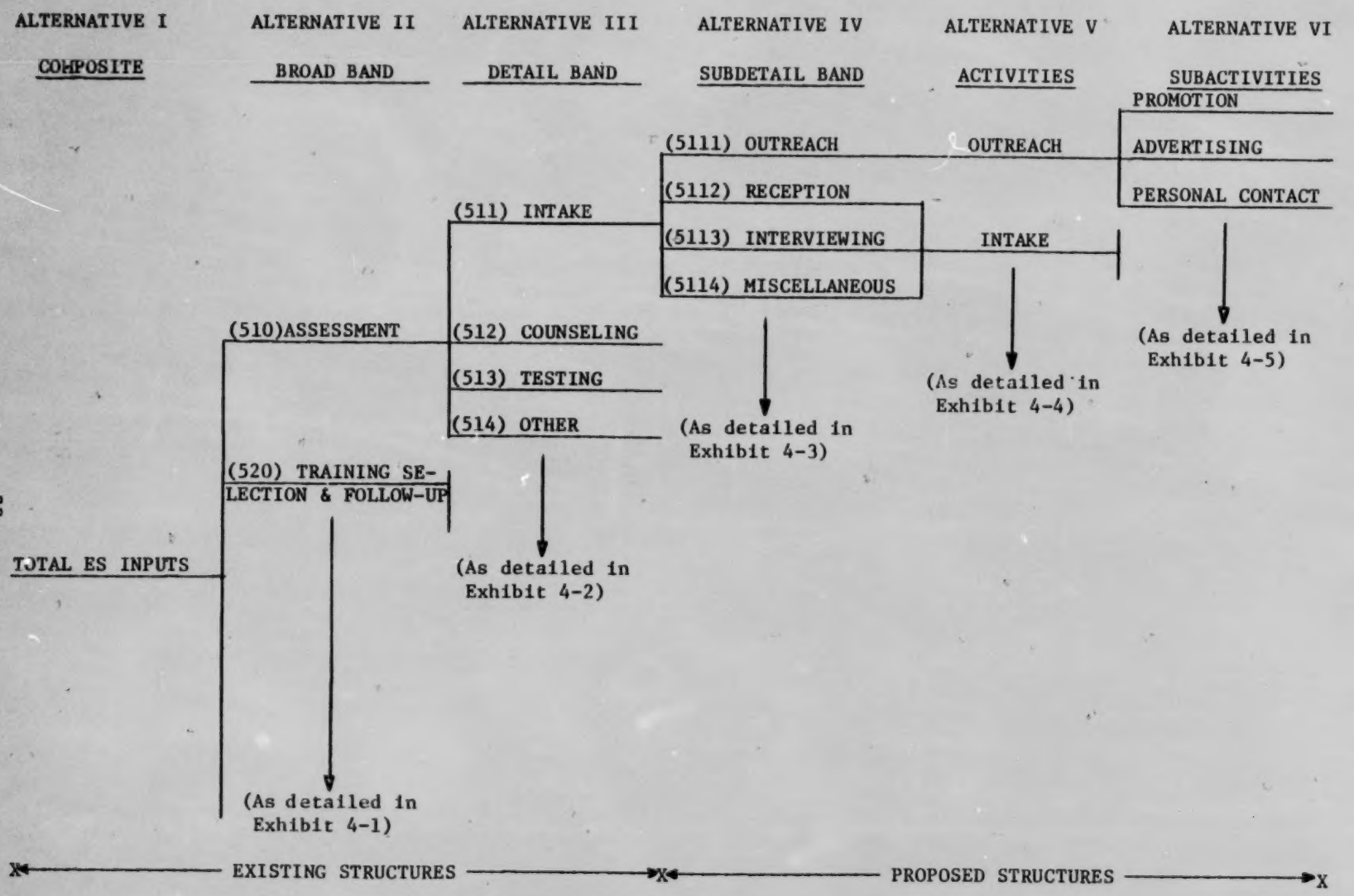


Exhibit 3-3. Relationship of Input Alternatives

The detailed structure and the relationships of the input variables can be displayed in a series of crosswalks. Appendix B shows the time distribution system detailed band (Alternative III) and subdetailed band (Alternative IV) relationships. Appendix C shows the subdetailed band (Alternative IV) and activity (Alternative VI) relationships. Appendix D shows the subdetailed band (Alternative IV) and subactivity (Alternative VI) relationships. The selection of the appropriate level of detail for the classification of SESA activities can only be achieved through consideration of data availability and an evaluation of the relative difficulties in implementing a specific system to measure an activity. These considerations are discussed in the following section.

3.3 ALTERNATIVE MEASUREMENT STRUCTURE FOR INPUT DATA

The measurement alternatives for the collection of input data within the context of existing SESA information systems range from a relatively simple system to an extremely complex system. The rationale for the selection of a specific alternative weighs heavily upon the resources available and the sensitivity desired by USES. At one extreme, a very simple system can be utilized based on data currently available. The level of aggregation and the built-in bias make it the least sensitive of the alternatives, and its simplicity and availability make it the least costly to implement. At the other extreme, a very complex system can be utilized requiring the development and implementation of a system of identifying and collecting information at a very detailed level. Such a system would be very sensitive; however, the difficulty of implementation and complexity of operation would make it the most costly alternative.

Alternative I

The simplest measure of input is the aggregation of all SESA activities. This measure can be directly obtained from the existing SESA accounting system reports. These reports display SESA expenditures in terms of man-hours, equivalent positions, personal service costs, non personal service costs, and total costs. These are shown by organizational unit,

by month, and in a manner which is totally compatible with the PMS concept. This data could be collected for the PMS with the minimum effort and without additional requirements being placed on SESA. This measure, however, is largely insensitive to variations in efforts made in individual SESA activities. The ratio based on the aggregated value of all SESA activities could be used to compare overall operations but would not allow decisive action on the part of managers to affect and improve the SESA system. Superior efforts in one program area could be offset by inferior efforts in another and could go unnoticed. Only agencies with uniformly superior or inferior services would be identified. This lack of ability to identify specific areas makes this level of aggregation too gross even in light of its low cost.

Alternative II

The second measure of input is the aggregation of SESA activities on the basis of the broad band code structure of the Cost Accounting System. This measure can be employed by obtaining values from the existing SESA accounting system reports which are in content and format essentially as described above. This measure is more sensitive to variations in efforts made in specific activities.

Alternative III

The third alternative measure of input is the aggregation of SESA activities on the basis of the detailed band code structure of the Cost Accounting System. The values based on this measure can be directly obtained from the existing SESA accounting system reports in context and format essentially as described above. This measure is more sensitive to variations in specific activities than the previous two and does not appreciably affect the costs for data collection.

Alternative IV

The fourth alternative measure of input requires the subdividing of the detailed band code structure of the cost accounting system in order to identify specific groups of activities or interest. The collection of data according to this structure could be achieved through a simple

modification of the existing time distribution structure or through a work measurement study utilizing, for example, the time ladder technique. Such a technique has been utilized for work measurement of ETA programs in the past and is one of the simplest techniques which can be applied.

Alternative V

The fifth alternative measure of input requires the utilization of a totally new structure of ES inputs. This structure is based on defining special ES activities under the particular categories of client specific LME functions, non client specific LME functions and non LME functions. The collection of data at the activity level could be achieved by a system of work sampling, either by employing analysts for this purpose or by utilizing the self-reporting technique. At certain time increments, the activity currently being worked on is identified. These sample data, collected over a specified period of time, can be utilized to determine the distribution of time by employees to the various activities. This technique is described in the Handbook on Work Measurement Systems for Use in Measuring Office Occupations[4/]. This measure of input is more sensitive than the previous alternatives but would require a significant effort by analysts in order to collect data.

Alternative VI

The sixth alternative, using the additional subactivities related to the structure defined in the fifth, could be achieved by the utilization of job tickets. Job tickets are a widely utilized work measurement technique and are also described in the referenced Handbook. A job ticket is attached, for example, to a client file. As the client is processed through the SESA system, time is annotated on the job ticket. A code

4/ P. Palmquist, Handbook on Work Measurement Systems for Use in Measuring Office Occupations. (Washington, D.C.: Office of State Operations, UIS, Manpower Administration, U.S. DOL, April 1972.)

identifying the specific activity performed would also be annotated on the card. This measurement is the most sensitive to differences in local operations, and the measurement techniques required are not as difficult as work sampling or time ladders.

The various alternatives are summarized in Exhibit 3-4, titled Summary of Input Measure Considerations. Any one of the alternatives will produce data which can be converted to man-years, equivalent positions, or dollar units.

3.4 ALLOCATION OF SUPPORT CATEGORIES

The SESA system of cost accounting provides for charging time to distinct functional code activities which cannot be directly related to output products. These functions, such as the AS&T codes, are charged back against ES funding through a cost allocation system. The structure of most state agencies is such that these costs are outside the control of ES managers. Since they cannot be directly related to agency products or readily managed by SESA personnel, it would seem illogical to combine these AS&T categories into the model itself. Consequently, the productivity measurement system excludes AS&T costs.

3.5 UNITS OF MEASURE

The selection of the specific units of measure of SESA inputs represents an important decision. Three distinct alternatives exist. These are:

- man-hours
- equivalent positions, and
- dollars.

Alternative	Description	Data Source	Sensitivity	Measurement Effort
I.	Total Aggregation of SESA Inputs	SESA Accounting System	Very Low	Minimal since information is readily available.
II.	Aggregation at TD Broad Band Level	SESA Accounting System	Very Low	Minimal since information is readily available.
III.	Aggregation at TD Detail Band Level	SESA Accounting System	Low	Minimal since information is readily available.
IV.	A New Structure Compatible with TD but at a Sub-detail Band Level	Work Measurement	Fair	Moderate effort if a system utilizing the time distribution forms with a detailed code is used. This method is not very accurate. Large effort if a system utilizing time ladders is utilized. This method is very accurate.
V.	A New Structure Using Activity Codes	Work Measurement	Good	Large effort if a system using work sampling is used. This method is very accurate. Moderate effort if a system of self-reporting work sample is used. This system has reasonable accuracy.
VI.	A New Structure Using Subactivity Codes	Work Measurement	Excellent	Moderate effort if a system of job tickets is used. This system has good accuracy.

Exhibit 3-4. Summary of Input Measure Considerations

The man-hours input in support of a particular activity are a common denominator of many productivity systems. Man-hours reflect actual effort input and are not influenced by salary differentials, or other variables.

The equivalent positions input differs from man-hours in that the actual agency work hours during the period are reflected. Equivalent position data can include or exclude leave. Within the context of the productivity model it is advisable to exclude leave since there is no direct relationship of leave to productivity, and leave factors vary widely among and within SESA's.

The dollar costs differ from equivalent positions by a cost per man-year factor. The inclusion of personal costs in input allows a reflection of the salaries of individual workers. This, of course, varies throughout SESA's and thus can affect the ratio solely on the basis of different salary scales. The inclusion of non personal costs in input allows a reflection of the support costs for rentals, equipment, and other items which are required and can have a direct impact on productivity. The exclusion of non personal costs could allow a well-equipped state to have a more favorable ratio. This is clearly indicated by the expectation that a well-equipped state with higher non personal services costs should have a higher productivity. Inclusion of those costs would reduce its ratio since its increased production is offset by its increased cost. Moreover, exclusion of costs of non personal services would encourage SESA's to utilize these services to increase production.

The SESA Productivity Measurement System objectives are best achieved by utilizing as an input measure the costs input to an activity. This measure can readily be converted to equivalent positions or man-hours by application of the appropriate factor.

4.0 OUTPUT MEASUREMENTS

The SESA productivity model must have, as one of its components, a method for identifying and quantifying SESA outputs which result from specific inputs. The development of output measures for the PMS was not restricted to those output measures utilized in the past. Rather, working within the context of the detailed subactivities discussed in a previous chapter, outputs were associated with each operational area. Using this approach alternative outputs were developed ranging from gross measures such as "placements" to those in which specific value is attached to each identifiable SESA output.

4.1 DEFINITION OF OUTPUT

The output component of the model consists of two parts. The first is the value of the particular output. The second is the frequency of outputs. The product of the two parts is the total value of the output and can be summed for all activities.

An output is defined as the result of an activity. An output may or may not be measurable. An output may be intermediate or terminal. An intermediate output is one which merely serves as a step toward the achievement of a higher output, for example, applicant outreach activities in support of a registration. Should outreach activities serve as the final output, that is, registration is never achieved, the output becomes terminal.

4.2 OUTPUT VALUATION

Determining the value of specific outputs resulting from SESA activities is a difficult task. For example, within the applicant service process, the PMS must set the relative market value for the individual who is being served by the SESA. The technique used in the PMS to assign values to SESA outputs is to establish a value for treatment, either objectively or subjectively, and to assign that value to any product

which receives this treatment. This is a "value added" approach.

When using the "value added" approach, existing systems of measurement can be used. For example, techniques of employability assessment have been developed which may satisfy the needs of the applicant process. To simplify the model, such a system of measurement can be applied to applicants at various stages as they move through the system. Average "value added" values can then be established. Such values can then be assigned to specific treatments. Values can also be established by using other study experience. For example, where a method for valuing counseling is agreed upon, it can be used to assign values to counseling outputs. It must be recognized that in any such process a particular measurement system must be "scaled" so that its range of values is compatible with those used in other areas. This is necessarily a subjective judgment but not a difficult one.

In several areas it is necessary to subjectively establish an order and a value for a range of services to be applied to a recipient of SESA services. For example, legislatively mandated SESA outputs must be analyzed and specific values assigned to various activities. Where the development of a value assignment scale is totally subjective, operations research techniques may be used to set values.

One of the methods most commonly used is the DELPHI technique, discussed in Section 2.4. This technique can be used by SESA managers to allow them to arrive at a consensus opinion as to the value to be assigned to SESA outputs.

4.3 MEASUREMENT OF FREQUENCY OF OUTPUTS

In addition to the establishment of a value for specific SESA outputs it is necessary to measure the frequency of outputs for a variety of categories. Numerous systems exist for collecting SESA data. The most important is ESARS, but several other systems exist at the state and federal levels, both internal and external to USES.

Advantages to utilizing existing information systems are obvious. SESA's currently operate with extensive reporting requirements, and adding new requirements would impede operations. Additionally, the use of established systems precludes start-up problems that new data systems encounter.

ESARS serves as the primary source for identifying SESA output information. The following paragraphs discuss ESARS from the perspective of its utility for measuring the required outputs. Appendix E describes the specific items of information available from the system.

The use of the "standard" ESARS system by a local SESA operation does not guarantee that the forms used are copies of those shown in the ESARS manual. The system does demand that each local operation develop the specific information that is required within the manual, that the definitions given are observed, and that the information item be placed on a data tape in the positions specified. Local offices may develop additional information or rearrange the data items on the form if they desire, as long as they produce the tape in required format.

The procedures for aggregating data from the tapes are not consistent across states. In some states basic data tapes are sent from each local office to the state, where the summary tapes and tables are produced. Within other states several central locations may perform the summarizing function. Regardless of the exact procedure used within states, the basic decision which had to be made was whether output data could be taken from the summary tables or whether the basic data tapes had to be used to measure the output. Some considerations follow.

Although during the study we made an in-depth examination of ESARS in only two state systems, it is our impression that the mechanics of the system operate smoothly and that the data required would be physically available. One of the first problems to be addressed, however, is that

of confidentiality. The PMS system as recommended would appear to favor strongly the use of basic tape data to track by individual and office. Use of information related back to individuals, however, may be contrary to current restrictions in the use of such data.

This is of particular note in the area of the "value added" credit for services short of placement provided to individuals. Although techniques might be developed to handle "groupings" of individuals, if summary data is used, it would seem that the system could be operated more effectively on data from sample sets of individuals. In this manner a direct relationship between the background (entry level) of the individual and the actual services provided can be established. Such an approach implies the use of the basic data record.

Use of the information presently collected for the 2% sample was also judged inappropriate for the PMS. The 2% sample information is collected no more frequently than on an annual basis. Upon request, states run a "canned" program against the basic tape data and develop complete information sets on individuals having certain Social Security numbers. Data collected in this fashion is too outdated to be of use in the allocation process. It also may be difficult to relate or track individuals from particular locations through a set of services. It is our recommendation, therefore, that the 2% sample not be considered as a data source for PMS.

It is our assessment that the PMS requires information from the basic data tape, supplemented by additional data from such sources as compliance and farm labor reports. As may be seen within the following subsections, we have identified the output measurement points with respect to their source. A specific data retrieval procedure similar to that used during the test period will satisfy the system's data requirements.

4.4 ALTERNATIVE OUTPUT CLASSIFICATIONS

Six distinct alternative structures of output classifications have been established for the model. These are compatible with the inputs described in Chapter 3. Each structure requires a different level of effort by SESA's in order to support the model. In this section each structure is defined, its output measures and sources identified, and the system support requirements discussed. Also, alternative systems of valuation for activities are identified.

The first output structure is that which would align itself with the total aggregation of SESA inputs. This structure would consist of a single workload measure. Since placements are the accepted USES objective, they would be a logical measure. The limitations of such a measure for productivity have been discussed within and outside the context of the resource allocation formula and, consequently, are not elaborated upon here.

The second output structure (Alternative II) is one which would align itself with an input structure coincidental with the broad band time distribution code structure. Such a structure has been utilized for productivity assessments to a limited degree in the past. Exhibit 4-1 displays the major functional areas, the proposed workload counts, and workload data sources for this structure.

The third output structure (Alternative III) aligns itself with the input structure coincidental with the detail band time distribution codes. Exhibit 4-2 displays the detailed functional areas, the proposed workload counts and workload data sources.

The fourth output structure (Alternative IV) is based on the time distribution codes but is more detailed than the existing detail band structures. Exhibit 4-3 displays this structure and the proposed workload counts and workload data sources.

The fifth output structure (Alternative V) is based on an entirely new set of activities and is shown in Exhibit 4-4. Finally, the sixth output structure is a more detailed structure based on the fifth, but with each activity broadened into subactivities, as shown in Exhibit 4-5.

Again, the selected system need not encompass all SESA outputs. However, there are distinct advantages to include as many outputs as possible. Obviously, the more detailed the structure the more sensitive the model will be with respect to specifying conditions within a state agency. (Text continues on page 57.)

(ALTERNATIVE II)

TD Code	Description	Units of Measure	Source
510	Assessment	Registrations	ESARS
520	Training	Test Transactions	ESARS
530	Employment and Job Development	Placements	ESARS
550	Employer and Community Services	Job Orders	ESARS
560	Manpower Information	None Available[1/]	-
600	MGT, Supervision and Training (Local)	None Available	-
605	MGT, Supervision and Training (Central)	None Available	-

1/This category comprises less than 5% of the total SESA activity

Exhibit 4-1. Time Distribution Broad Band Codes
Output Measures and Sources

(ALTERNATIVE III)

TD Code	Description	Unit of Measure	Source
511	Intake	Registrations	ESARS
512	Counseling	Counseling Transactions	ESARS
513	Testing	Testing Transactions	ESARS
514	Other	Intermediate Output	-
520	Training	Referrals	ESARS
531	Employment	Placements	ESARS
532	Job Development and Placement - OJT	-	-
533	Job Development and Placement - PSE	-	-
534	Periodic Exposure to the Job Market	-	-
551	Employer and Union Services	None Available	-
552	Employer Technical Services	Job Modifications	New Count
553	Immigration Activities	Immigrants Processed	New Count
554	Community Services	None Available	-
561	Labor Area Information	None Available	-
563	Operations Research	None Available	-
564	Occupational Analysis Field Centers	None Available	-
565	Test Development	None Available	-
566	Job Search Information	None Available	-
610	Management and Supervision - ES Local	None Available	-
620	Staff Technical Services - ES Local	None Available	-
630	Career Development and Training - ES Local	None Available	-
611	Management and Supervision ES Central	None Available	-
621	Staff Technical Services - ES Central	None Available	-
631	Career Development and Training - ES Central	None Available	-

Exhibit 4-2. Time Distribution Detailed Band Output Measures and Sources

(ALTERNATIVE IV)

Code	Description	Unit of Measure	Data Source
(5111)	Outreach Activities	Intermediate Output	-
(5112)	Receptionist Activities	Registrations	ESARS
(5113)	Interviewing	Job Referrals	State Count
(5114)	Misc. Intake Activities	Intermediate Output	-
(5121)	General Counseling Activities	Counseling Transactions	ESARS
(5122)	Interpreting Tests	Testing Transactions	ESARS
(5131)	Testing	Testing Transactions	ESARS
(5141)	Case Conference Meetings	Counseling Transactions	ESARS
(5142)	Develop Employability Plans	Plans Developed	ESARS
(5143)	Group Orientation	Intermediate Output	-
(5211)	Training Selection, Referral Follow-Up	Applicants Referrals for Training	ESARS
(5212)	Training Development Activities	Applicants Referrals for Training	ESARS
(5311)	Job Order Taking	Orders Taken	ESARS
(5312)	Selection Interviewing	Placements	ESARS
(5313)	Job Bank	Orders Taken	ESARS
(5321)	Job Development/Placement/ Follow-Up-WIN-OJT	-	-
(5331)	Job Development/Placement/ Follow-Up-WIN-PSE	-	-
(5341)	Periodic Exposure to the Job Market	-	-
(5511)	Employer and Union Services	None Available	-
(5521)	Employer Technical Services	Job Modifications	New Count
(5531)	Immigration Activities	Immigrants Processed	New Count
(5541)	Community Services	None Available	-
(5611)	Gather and Disseminate Information	None Available	-
(5612)	Preparing Newsletters and Reports	None Available	-

Exhibit 4-3. Time Distribution Subdetail Band Sources Output Measures and Sources

(ALTERNATIVE IV)

Code	Description	Unit of Measure	Data Source
(5621)	Occupational Opportunities Information	None Available	-
(5631)	Operations Research	None Available	-
(5641)	Occupational Analysis Field Center	None Available	-
(5651)	Test Development	None Available	-
(6101)	Management and Supervision (Local)	None Available	-
(6201)	Staff Technical Service Farm (Local)	None Available	-
(6202)	Staff Technical Service Other (Local)	None Available	-
(6301)	Career Development and Training (Local)	None Available	-
(6111)	Management and Supervision (Central)	None Available	-
(6211)	Staff Technical Service Farm (Central)	None Available	-
(6212)	Staff Technical Service Other (Central)	None Available	-
(6311)	Career Development and Training (Central)	None Available	-

Exhibit 4-3 (continued) Time Distribution Subdetail Band Structure
Output Measures and Sources

(ALTERNATIVE V)

Description		Output Unit	Source
1.0	Client Specific LME Functions		
1.1	Applicant Process		
1.11	Outreach	Applicants Registered	ESARS
1.12	Intake	Interviews Scheduled	New Count
1.13	Diagnostic Assessment	Tested Applicants	ESARS
1.14	Employability Development Resource Mobilization	Agreements Established	New Count
1.15	Employability Development	Applicants Counseled	ESARS
1.2	Employer Process		
1.21	Outreach	Intermediate Output	-
1.22	Voluntary Order Solicitation	Job Openings (by source)	New Count
1.23	Mandatory Listing	Job Openings (by source)	New Count
1.24	Job Creation	Job Openings (by source)	New Count
1.25	Farm Labor	Job Openings (by source)	New Count
1.26	Job Identification	Intermediate Output	-
1.27	Client Specific Job Order Solicitation	Job Openings (by source)	New Count
1.28	Order Taking	Orders Taken	ESARS
1.29	Employer Technical Assistance	Job Openings (by source)	New Count
1.3	Job Matching		
1.31	Job Matching	Job Referrals	ESARS
1.32	Verification/Follow-Up	Placements	ESARS

Exhibit 4-4. Activity Level Structure
Output Measures and Sources

(ALTERNATIVE V)

	Description	Output Unit	Source
2.0	Non Client Specific LME Functions		
	2.1 Labor Market Information	-	-
	2.2 Farm Labor Wage Survey	-	-
3.0	Non-LME Functions		
	3.1 Employer Protection	Complaints Resolved	Compliance Report
	3.2 Farm Labor Protection	Orders Investigated	Compliance Report
	3.3 Foreign Trade Act	Referrals	New Count
	3.4 Employer Complaint (SESA Services)	Complaints Resolved	New Count
	3.5 Immigration/Alien Certification	Cases Processed	New Count
	3.6 Learner Certification	-	-
	3.7 DMP #4	Applications	MA 7-38

Exhibit 4-4. Activity Level Structure
Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
APPLICANT PROCESS ACTIVITY OUTPUTS		
Outreach Activity Outputs		
. Applicant/Awareness of SESA Service Availability	N/A*	-
. Applicant/SESA Office Contract	Applicants Registered (partial or full)	ESARS, State
. Applicant/SESA Scheduled Interview	Interviews Scheduled	New Count
. Cooperation Agreement	N/A*	-
Intake Activity Outputs		
. Applicant Awareness of Service Need	Intermediate Output	-
. Applicant Awareness of Apprenticeship Program	Intermediate Output	-
. Applicant Scheduled Interview	Interviews Scheduled	New Count
. Applicant Awareness of Job Market Openings	Intermediate Output	-
. Non-SESA Service Provision (By Referral)	Applicants Referred	ESARS
Diagnostic Assessment Activity Outputs		
. Applicant Case File	Files Established	New Count
. Test Result	Testing Transactions	ESARS
. Non-SESA Service (By Referral) Provision	Applicants Referred	ESARS

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

*N/A - None Available

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
APPLICANT PROCESS ACTIVITY OUTPUTS		
Diagnostic Assessment Activity Outputs (continued)		
. Labor Supply Information Records	Intermediate Output	-
. Applicant Aptitude/Interest Profile	Intermediate Output	-
. Applicant Awareness of Job Qualifications and Potential	Intermediate Output	-
. Applicant Awareness of Employment Development Service Needs	Intermediate Output	-
. Employability Development Service Plan/Schedule	Intermediate Output	-
. Job Match Plan/Schedule	Intermediate Output	-
. Work Test Certification for UI	UI Registration	New Count
. Work Test Certification for Welfare	Welfare Registrations	New Count
. Work Test Certification for Food Stamps	Food Stamp Registrations	New Count
Employability Development Resource Mobility Activity Outputs		
. SESA/Supportive Service Agency Treatment	Intermediate Output	-
. SESA/Training Agency Agreement	Agreements Established	New Count

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
APPLICANT PROCESS ACTIVITY OUTPUTS		
Employability Development Activity Outputs		
. Arrangement for Supportive Service	Intermediate Output	-
. Arrangement for Training	Intermediate Output	-
. Referral to Supportive Service	Applicants Referred	ESARS
. Referral for Training	Applicants Referred	ESARS
. Informed Job Ready Individual	Applicant Counseled	ESARS
. Job Match Plan (Occupational Goal)	Intermediate Output	-
. Apprenticeship Referral	Applicants Referred	ES 239
. Referral to Apprenticeship Program	Applicants Referred	ES 239
. Follow-Up Report	Applicants Accepted	ES 239/ESARS
EMPLOYER PROCESS ACTIVITY OUTPUTS		
Employer Outreach Service Outputs		
. Employer Awareness of SESA Service Availability	Intermediate Output	-
. Employer Inquiry	Intermediate Output	-
. Employer Job Order	Job Order	ESARS

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
EMPLOYER PROCESS ACTIVITY OUTPUTS		
Voluntary Order Solicitation Activity Outputs		
. Employer Awareness of SESA Service Availability	Intermediate Output	-
. Employer Inquiry	Intermediate Output	-
. Employer Job Order	Job Order	ESARS
Mandatory Listing Activity Outputs		
. Listing Compliance (Legal Requirement Satisfaction)	Intermediate Output	
. Employer Awareness of SESA Service Availability	Intermediate Output	
. Employer Inquiry	Intermediate Output	
. Employer Job Order	Job Orders	ESARS/Mandatory Listing
Job Creation Activity Outputs		
. Restructured Job Content	Job Modification	New Count
. Modified Job Entrance Requirements	Job Modification	New Count
. Altered Job Benefits and Conditions	Job Modification	New Count
. Subsidized Job - OJT, PSE, Work Experience	Job Modification	New Count
. Job With Tax Credit	Job Modification	New Count
. Employer Awareness of SESA Service Availability	Intermediate Output	-
. Employer Inquiry	Intermediate Output	-
. Employer Job Order	Job Order	ESARS

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
EMPLOYER SERVICE ACTIVITY OUTPUTS		
Farm Labor Employer Activity Outputs		
. FLC Awareness of Registration Requirements	Intermediate Output	-
. FLC Registrant Accepted	Registrants FLC	
. FLC Registered with ESA	Acceptance	
. FLC Job Orders	Job Orders	
Available Job Identification Outputs		
. SESA Awareness of Job Availability	Intermediate Output	-
Client Specific Job Order Solicitation Outputs		
. SESA Awareness of Job Availability	Intermediate Output	-
. Employer Inquiry	Intermediate Output	-
. Employer Job Order	Orders	ESARS
Order Taking Activity Outputs		
. Recorded Order	Transactions	ESARS
. Job Bank, Order List	N/A	
. Job Bank Output	N/A	
- List Printout	N/A	
- List Distribution	N/A	

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
EMPLOYER SERVICE ACTIVITY OUTPUTS		
Employer Technical Assistance Activity Outputs		
. Job Orders	Job Orders	ESARS
. Employer Awareness of SESA Service Availability	Intermediate Output	-
. Improved Manpower Resource Utilization		
- Restructured Job Content	Job Modification	New Count
- Modified Job Entrance Utilization	Job Modification	New Count
- Altered Job Benefit & Contributions	Job Modification	New Count
- Subsidized Job	Job Modification	New Count
- Job With Tax Credit	Job Modification	New Count
- Employer Awareness of SESA Service Availability	Intermediate Output	
- Employer Inquiry	Intermediate Output	
- Employer Job Order	Job Order	ESARS
. Assisted AA Plan Development	N/A	-
. EEO Compliance	N/A	-

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
JOB MATCHING ACTIVITY OUTPUTS		
Job Matching Activity Outputs		
. Client/Job(s) Match List	Intermediate Output	-
. Job/Client(s) Match List		-
. Match	Matches	New Count
. Schedule of Placement Interview	N/A	-
. Order Referral for Clearance	Intermediate Output	-
. Interview Scheduled	Intermediate Output	-
. Referral to Job Openings	Referrals	ESARS
. Accompanied Client/SESA Job Interviews	N/A	-
. Interview	Intermediate Output	
. Job Placement	Intermediate Output	
. Job Verification Form (Verified Job)	Verified Placement	ESARS
. Retained Job	N/A	
Verification/Follow-Up Activity Outputs		
. Job Verification Form (Verified Job)	N/A	
. Retained Job	N/A	
MARKET EXCHANGE FUNCTIONS		
Labor Market Information Outputs		
. Labor Market Information Reports		
. Job Information System		
. Special Labor Market Reports		

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
MARKET EXCHANGE FUNCTIONS		
Farm Labor Wage Survey Activity Outputs		
. SESA Awareness of Wage Levels by Crop		
. Applicant Awareness of Wage Levels by Crop		
. Farm Labor Wage Standards by Crop Report		
NON-LABOR MARKET EXCHANGE ACTIVITIES		
Employee (Applicant) Protection Activity Outputs		
. Employer/Employee (Applicant) Awareness of SESA Employee Protection Service	Intermediate Output	-
. Filed Employee Service	Complaints Filed	Compliance Report
. Improved SESA Service	Intermediate Output	
. Resolved Employee Complaint	Intermediate Output	
- Corrected "wrong"	Intermediate Output	
- No "wrong"	Intermediate Output	
. Reported Complaint	Intermediate Output	
. SESA Sure of Complaint Resolution	Complaints Resolved	Compliance Report

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
NON-LABOR MARKET EXCHANGE ACTIVITIES		
Farm Labor (Applicant) Protection Activity Outputs		
. Job Order in Compliance	Orders Investigated	Farm Labor Compliance Report
. SESA Awareness of Compliance/Non-Compliance	Intermediate Output	-
. Reported Non-Compliance	Intermediate Output	-
Foreign Trade Act Outputs		
. SESA/ILAB Awareness of Firms/Unions Adversely Affected by Trade Act	Intermediate Output	-
. Applicant Awareness of Allowance Eligibility	Intermediate Output	-
. Applicant/UI Referral	Referrals	New Count
Employer Complaint Activity Outputs		
. Filed Employer Complaint	Complaints Filed	New Count
. Resolved Employer Complaint	Complaints Resolved	New Count
Immigration/Alien Certification Activity Outputs		
. SESA Awareness of Immigrants Occupational Demand	Intermediate Output	
. SESA/Immigration Awareness of Domestic Worker Availability	Intermediate Output	
. SESA/Immigration Awareness of Affect of Immigrant Hire	Intermediate Output	
. Certification/Rejection	Cases Processed	New Count

Figure 4-5. Detailed Subactivity Structure Output Measures and Sources

(ALTERNATIVE VI)

OUTPUT MEASURES	UNIT OF MEASURE	ANTICIPATED SOURCES
NON-LABOR MARKET EXCHANGE ACTIVITIES		
Learner Certification Activity Outputs		
. ESA Awareness of Experienced Worker Availability		
. ESA Awareness of Learner Supply		
Defense Manpower Policy Issuance #4 Activity Outputs		
. SESA Awareness of High Unemployment Areas Under DMP #4	Intermediate Count	-
. DMP #4 Eligible Area Publication	Intermediate Count	-
. DMP #4 Employer Awareness of Preference Certification Requirements	Intermediate Count	-
. Accepted/Rejected Preference Application	Applications	MA 7-38
. DMP #4 Employer Preference Certification	Intermediate Count	-
. SESA Awareness of DMP #4 Employer Compliance/Non-Compliance	Intermediate Count	-
. Violations Reported	Intermediate Count	-

Figure 4-5. Detailed Subactivity Structure
Output Measures and Sources

4.5 SUMMARY OF OUTPUT MEASUREMENT ALTERNATIVES

It is convenient at this point to summarize the alternative approaches to the measurement of SESA outputs. This summary is shown in Exhibit 4-6. Included in this summary is an estimate of the sensitivity of the model corresponding to each level of detail for output data collection. As sensitivity improves the measurement effort increases, for example, Alternative VI requires the establishment of 21 additional measures. The feasibility of using this alternative was examined during the data collection phase of the pilot tests. Chapter 6 of this report discusses the on site experience in evaluating the practicality of these alternatives.

Alternative	Description	Existing	New	Total Measures	Sensitivity	Measurement Effort
I.	Total Aggregation of SESA Outputs	1	0	1	Very Low	Minimal
II.	Aggregation at Broad Band Level	4	0	4	Very Low	Minimal
III.	Aggregation at Detail Band Level	5	2	7	Low	Moderate
IV.	Aggregation At Subdetail Band Level	12	3	15	Fair	Moderate
V.	Activity Level	9	11	20	Good	Substantial
VI.	Subactivity Level	26	21	47	Excellent	Substantial

Exhibit 4-6. Summary of Output Measurement Alternatives

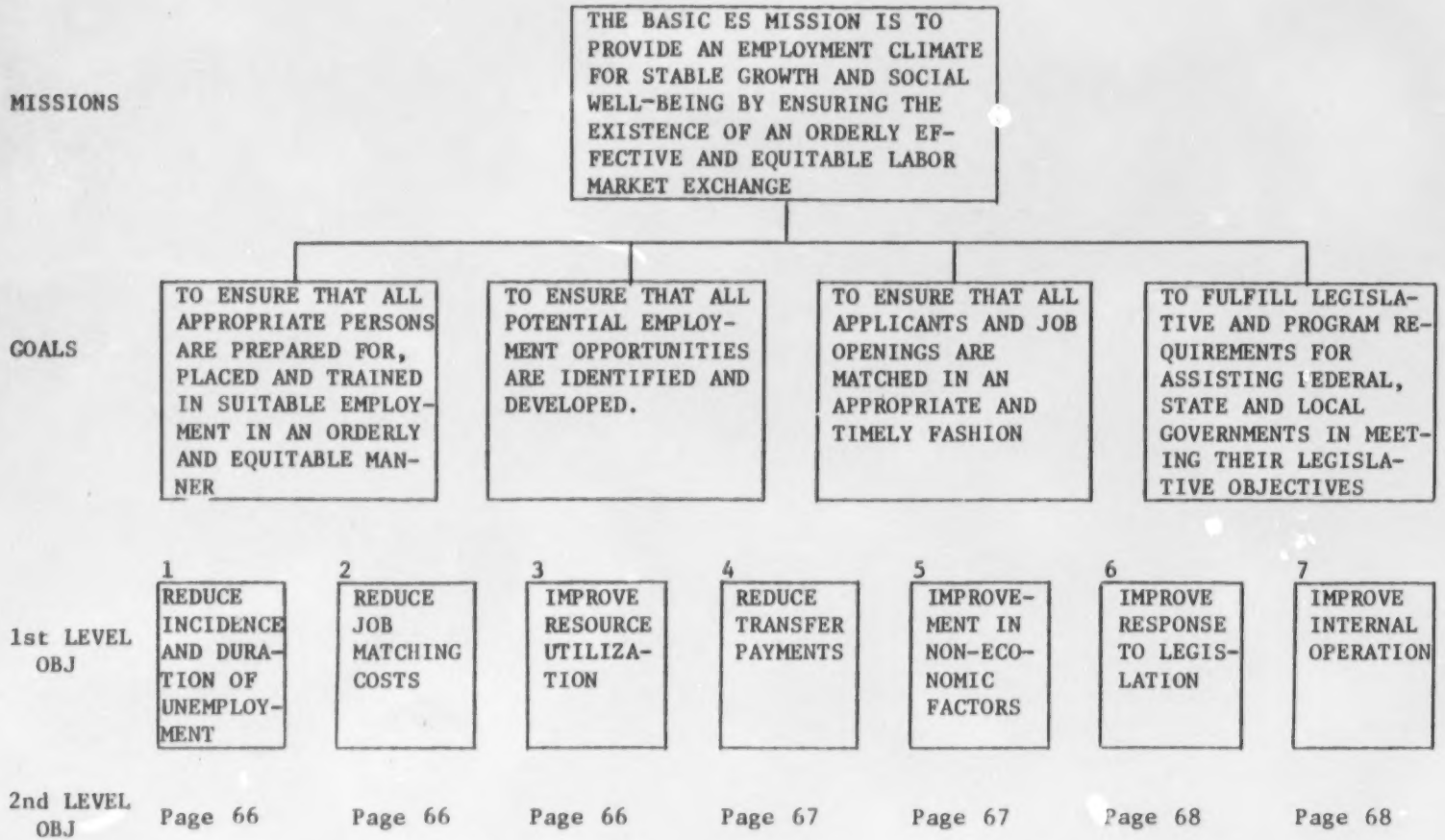
5.0 COMPONENT AGGREGATION

In order to rationally establish policy weights for the various model components, it is first necessary to establish the Employment Service objectives, relate them to the specific activities and outputs of USES, and establish a value for each objective.

5.1 CONCEPT OF AGGREGATION

This section is concerned with specifically identifying a set of SESA objectives for the model component weighting. Objectives are defined as a measurable level of program achievement. The approach used identifies the broader Employment Service concerns from which the objectives are derived and describes the relationship of these objectives to operational activity. An overall program structure for the Employment Service is established to delineate the agency's objectives and permit us to relate these to SESA activities and outputs. This permits assigning relative values to particular outcomes based on their contribution to objectives. To properly establish such relationships, objectives must be clearly and narrowly defined. Moreover, these objectives must be derived from broader goals implied by the overall mission of the Employment Service to permit policy makers to assign relative policy weights to the objectives and, in effect, establish appropriate priorities.

The authorizing legislation for the agency, the Wagner-Peyser Act, is broad. Its use as a base for developing objectives is complicated by the numerous additional provisions contained in other enabling legislation and in executive orders which, in effect, add or redefine basic Employment Service responsibilities. Some efforts to redefine the mission of the Employment Service are underway, however, the time constraints dictated by this project did not permit us to wait for the conclusion of the policy-making process. A candidate listing of Employment Service objectives was, therefore, developed and is shown starting on Page 66. Exhibit 5-1 summarizes these objectives.


MISSIONS
THE BASIC ES MISSION IS TO PROVIDE AN EMPLOYMENT CLIMATE FOR STABLE GROWTH AND SOCIAL WELL-BEING BY ENSURING THE EXISTENCE OF AN ORDERLY EFFECTIVE AND EQUITABLE LABOR MARKET EXCHANGE
GOALS
TO ENSURE THAT ALL APPROPRIATE PERSONS ARE PREPARED FOR, PLACED AND TRAINED IN SUITABLE EMPLOYMENT IN AN ORDERLY AND EQUITABLE MANNER
TO ENSURE THAT ALL POTENTIAL EMPLOYMENT OPPORTUNITIES ARE IDENTIFIED AND DEVELOPED.
TO ENSURE THAT ALL APPLICANTS AND JOB OPENINGS ARE MATCHED IN AN APPROPRIATE AND TIMELY FASHION
TO FULFILL LEGISLATIVE AND PROGRAM REQUIREMENTS FOR ASSISTING FEDERAL, STATE AND LOCAL GOVERNMENTS IN MEETING THEIR LEGISLATIVE OBJECTIVES
1st LEVEL OBJ
1 REDUCE INCIDENCE AND DURATION OF UNEMPLOYMENT
2 REDUCE JOB MATCHING COSTS
3 IMPROVE RESOURCE UTILIZATION
4 REDUCE TRANSFER PAYMENTS
5 IMPROVEMENT IN NON-ECONOMIC FACTORS
6 IMPROVE RESPONSE TO LEGISLATION
7 IMPROVE INTERNAL OPERATION
2nd LEVEL OBJ
Page 66
Page 66
Page 66
Page 67
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Page 68

Exhibit 5-1. Summary of Employment Service Objectives

5.2 STRUCTURING EMPLOYMENT SERVICE OBJECTIVES

The Employment Service is presently intended to be an instrument of both economic and social policy, with an operational focus that is limited to labor market activity. The central mission of the Employment Service, therefore, is to serve as a labor exchange mechanism with both economic and social purposes. From this statement of "purpose", the mission and goal structure can be developed.

SESA Mission: The basic Employment Service mission is to provide an employment climate for stable economic growth and social well-being by ensuring the existence of an orderly, effective and equitable public labor market exchange system to supplement other private and institutional labor market exchange mechanisms.

SESA Goal: To ensure that all appropriate persons are prepared for, trained, and placed in suitable employment in an orderly and equitable manner.

SESA Goal: To ensure that all applicants and job openings are matched in an appropriate and timely fashion.

SESA Goal: To ensure that all potential employment opportunities are adequately defined and communicated.

SESA Goal: To fulfill appropriate legislative and administrative requirements for assisting Federal, state and local governments in meeting their legislative objectives applicable to the labor market, and to improve agency responsiveness through upgrading SESA operational responses.

This statement of the overall mission and major goals provides a framework for defining objectives.

A summary of objectives is listed in the chart provided on page 64. First level objectives are to:

- reduce the incidence and duration of unemployment,
- reduce job matching costs,
- improve resource utilization,
- reduce transfer payments,
- improve non-economic factors,
- improve response to legislation, and
- improve internal operation.

Four first level objectives listed are inferred directly from the labor exchange function and can be viewed as having an economic orientation, with secondary social consequences. The other first level objectives listed reflect a primary concern for social consequences. Again, it is apparent that social objectives have economic consequences. In each instance, one result is a by-product of the other. The two orientations, economic and social, have not been separated with respect to mission and goals, and, therefore, they are not separated within the objectives. This lack of separation will increase the policy-making difficulty when attaching policy weights to individual second level objectives. (To permit ease of reference "second level objectives" will be referred to as "objectives" in the remainder of the text. First level objectives will be referred to as such.) Lack of separation does not preclude exercising policy judgments, however. The combination of social and economic factors will require that policy-makers make a value trade-off when setting specific policy values for each objective.

5.3 RELATING OPERATIONAL ACTIVITIES TO OBJECTIVES

To assist in assigning values to objectives it was useful to trace the relationship of objectives to first level objectives, then to goals and finally to the Employment Service mission as displayed in Exhibit 5-1.

This exhibit provided a chart showing which specific objective was derived from which first level objective and, in turn, identified the goal from which the first level objective was derived.

The objectives were arrayed as shown in Exhibit 5-2, with the lowest activity level (subactivity) related to individual outcomes of the existing SESA activities. This arrangement permits policy-makers to assign appropriate policy weights throughout the program structure. These values, along with productivity measures, can then be combined into an overall productivity index.

The goals and objectives so developed are next related to the basic program structure. The SESA program structure can display expenditure choices in terms of SESA "programs" and SESA "activities" designed to meet overall agency objectives. The definitions to be used which are reflected or suggested by the program structure are as follows:

Goal: A value to be sought; typically a broad statement implying an ideal or direction in abstract terms; a term of reference.

Objective: An end result which may be attained and for which attainment may be measured. Objectives are oriented toward impact consideration and imply that a benefit measure relating to how people are affected exists.

Benefit: A reflected improvement in the social or economic well-being of people. This measure is frequently used for evaluating alternative investments in terms of objectives.

Program: A constellation of activities directed toward a specific target group. Program "results" relate directly to benefits, i.e., indicators of progress toward stated objectives.

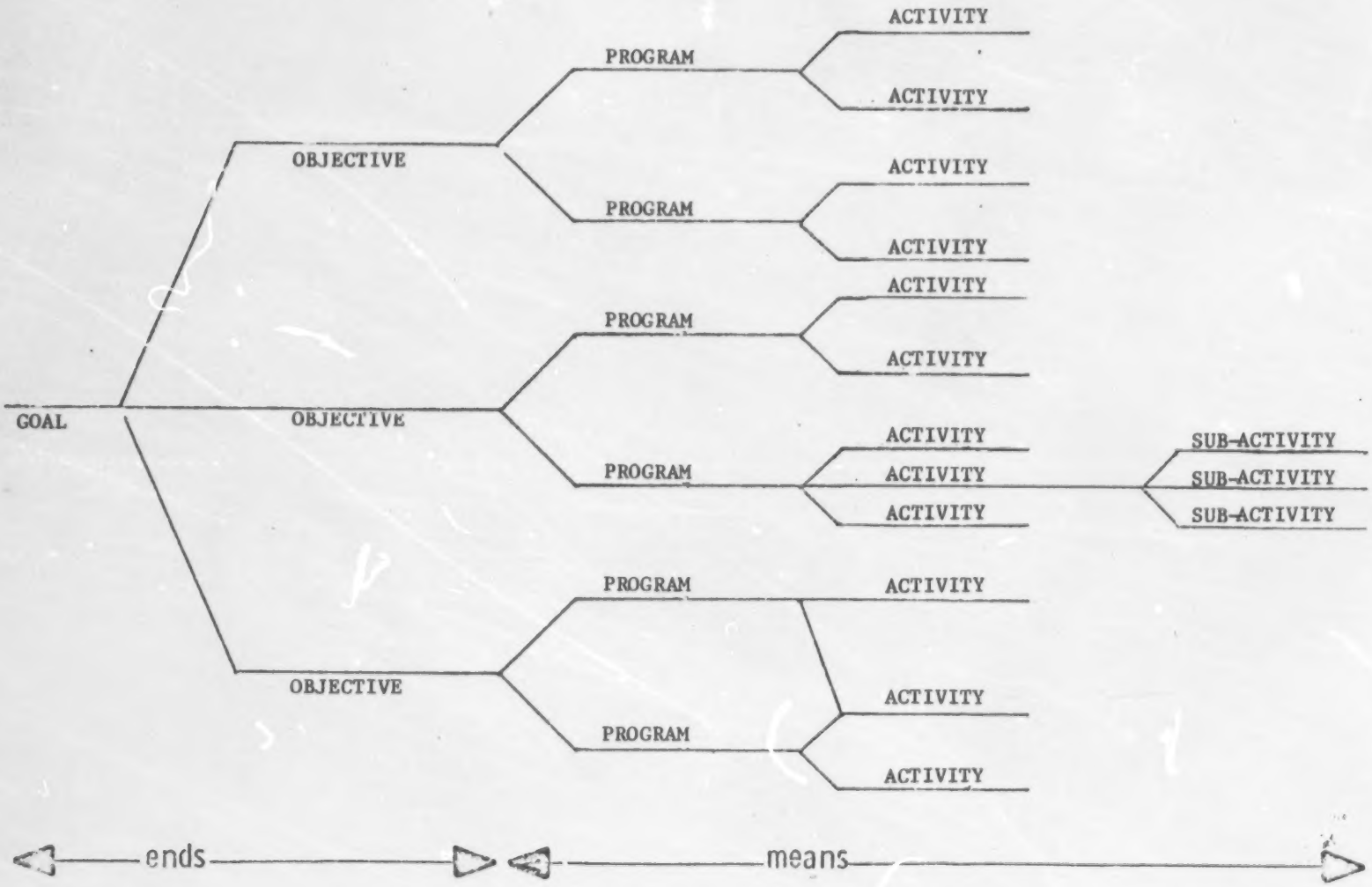


Exhibit 5-2. Mission/Goal/Objective Program Structure

Activity: A segment of a program consisting of related treatments, services or internal work products generated by agency work, for example, counseling services.

Sub-Activity: A sub-category of corresponding activities that reflect a more specific work product level.

Output: The result of an activity. An output may or may not be measurable.

In approximating the definition of objectives and lower level activities of the program structure, the following criteria are used to select and define candidate categories.

- Objectives are logically related to higher ordered goals and objectives and are consistent with the departmental goal statement.
- Objectives are logically translatable into quantifiable measures of output to provide criteria for investment choices.
- Objectives are defined with sufficient precision to permit specific issues to be identified with respect to competing or complementary objectives.
- Objectives are structured to encourage and facilitate the systematic analysis of wide-range of activity combinations suitable for achieving objectives.

The extent to which selected objectives meet the above criteria is extremely important as the process to develop policy weights for application to selected outputs in the compilation of the overall productivity index begins. As summarized from the chart (Exhibit 5-1), which illustrates the relationship among the various levels of objectives, candidate SESA objectives are:

1. Reduce Incidence and Duration of Unemployment

   - Reduce duration of job vacancy.
   - Reduce duration of worker unemployment.
   - Reduce frictional unemployment.
   - Reduce structural unemployment.
   - Reduce turnover.
   - Reduce unnecessary entrance requirements.
   - Reduce training/educational barriers to employment.
   - Reduce personal/social/medical barriers to employment.
   - Reduce time for job order filling.
   - Reduce time spent in job search.
   - Fill job orders.
   - Place job ready applicants.
   - Ensure an adequate supply of year-round farm workers.
   - Reduce recessionary impact of unemployment on local communities.

2. Reduce Job Matching Costs

   - Reduce job search costs.
   - Reduce recruitment costs.

3. Improve Resource Utilization

   - Reduce employer training time and costs.
   - Increase quality of job match.
   - Increase appropriateness of job entry requirements.
   - Improve worker utilization.

- Improve plant resource utilization.
- Maximize applicant earnings.
- Minimize employer labor costs.
- Improve access of new industry to local communities.
- Maximize resource utilization of non-SESA's (Manpower, Voc Ed., Welfare, etc.).
- Improve vocational school curriculum planning.
- Improve local/regional economic development planning.

4. Reduce Transfer Payments

- Reduce UI payments.
- Reduce welfare payments.
- Reduce food stamp payments.

5. Improvement in Non-Economic Factors

- Increase equitable distribution of job opportunities.
- Improve worker conditions.
- Improve worker benefits.
- Provide worker protection.
- Implement service priorities (vets, youth, etc.).
- Ensure adequacy of housing standards for migrant workers.
- Ensure adequacy of working conditions for migrant workers.
- Ensure equitable distribution of services and employment opportunities to rural workers.
- Minimize adjustment to displaced workers (Trade Act).
- Ensure appropriate learner certification of young workers.
- Fulfill manpower needs to meet national emergency/mobilization needs.
- Ensure equity of services and working conditions.
- Ensure access of refugees to employment opportunities.
- Support Armed Forces recruitment efforts.
- Develop appropriate Job Corps opportunities.
- Improve access to job opportunities for youth.

- Improve access to job opportunities for handicapped.
- Improve access to job opportunities for minorities.
- Improve access to job opportunities for women.
- Improve access to job opportunities for older workers.
- Improve access to job opportunities for economically disadvantaged.
- Improve access to job opportunities for seasonal workers.
- Ensure re-employment of displaced persons affected by major natural disasters.
- Ensure access of disadvantaged and minorities to union trades.
- Improve data base for affirmative action planning.

6. Improve Response to Legislation

- Ensure legislative compliance with FLCRA.
- Support provisions of Immigration Act through alien certification.
- Ensure eligibility of applicants for Trade Act assistance.
- Ensure that FmHA loan guaranties are made to appropriate plants.

7. Improve Internal Operation

- Improve occupational testing mechanism.
- Update DOT Codes and improve their accuracy and usability.
- Improve service program approaches and strategies.

As the complete productivity model structure falls into place, a logical flow of SESA agency resources, from the most basic application, (sub-activities,) toward the objectives and goals to which they are directed is apparent. The relationships are shown in Exhibits 5-3 through 5-6.

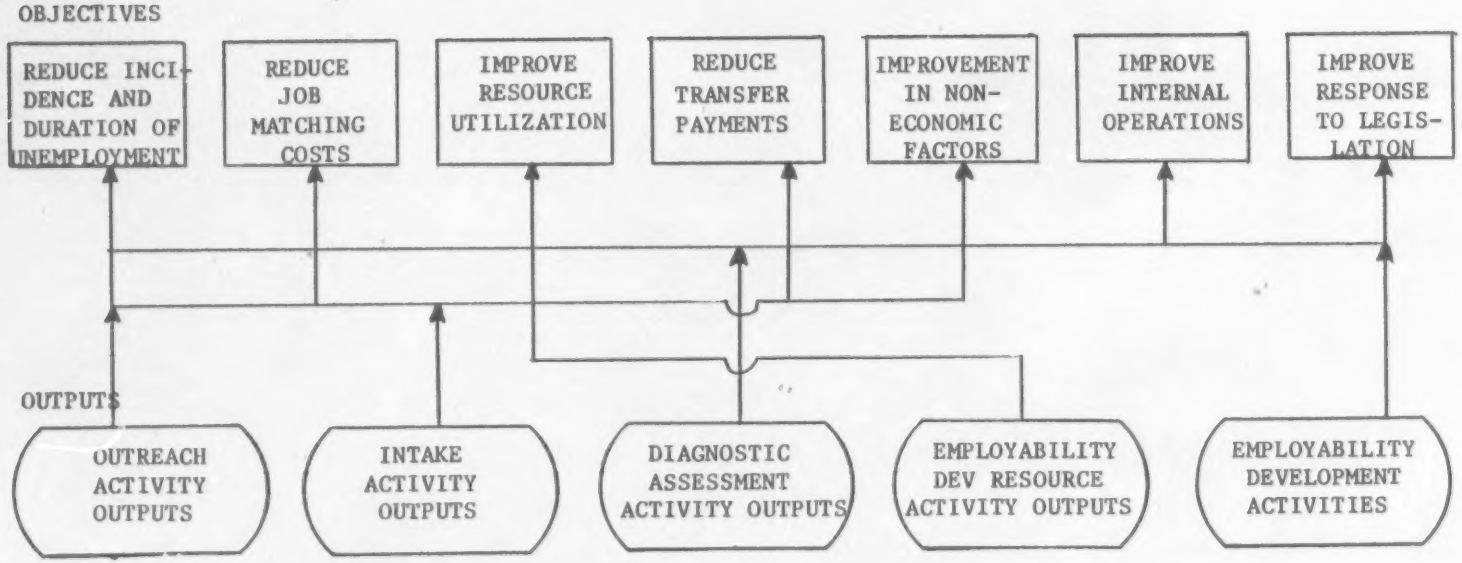


Exhibit 5-3. Relationship of Applicant Process Activities to USES Objectives

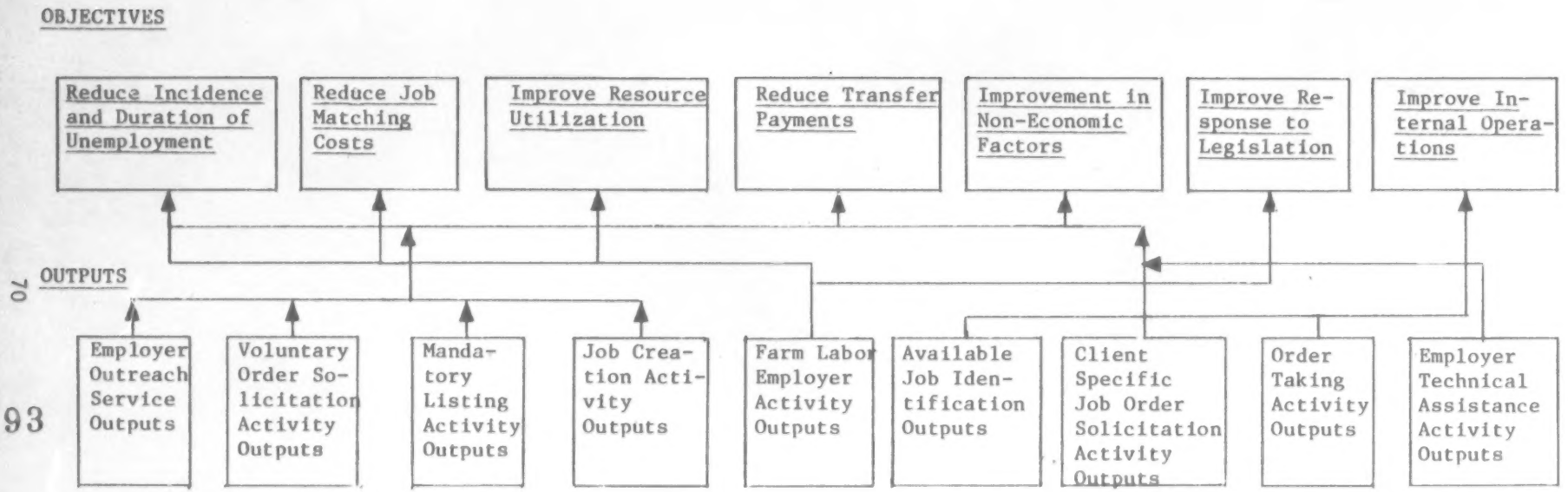


Exhibit 5-4. Relationship of Employer Process Activities to USES Objectives

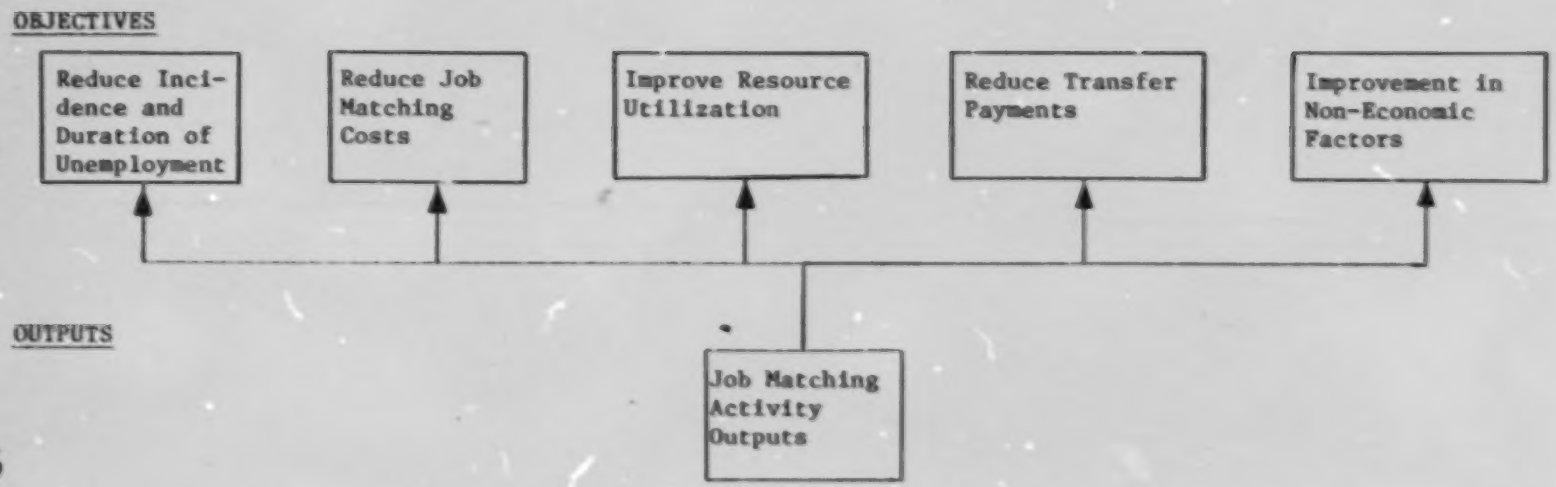


Exhibit 5-5. Relationship of Placement Process to USES Objectives

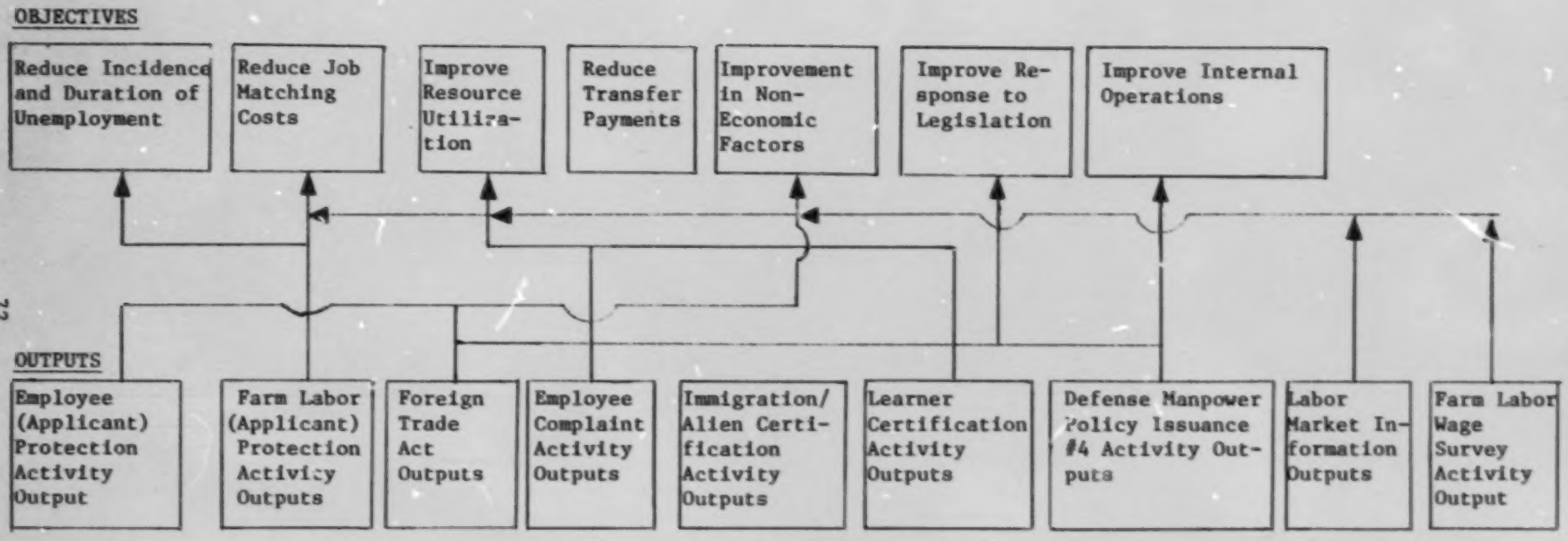

OBJECTIVES
Reduce Incidence and Duration of Unemployment
Reduce Job Matching Costs
Improve Resource Utilization
Reduce Transfer Payments
Improvement in Non-Economic Factors
Improve Response to Legislation
Improve Internal Operations
OUTPUTS
Employee (Applicant) Protection Activity Output
Farm Labor (Applicant) Protection Activity Outputs
Foreign Trade Act Outputs
Employee Complaint Activity Outputs
Immigration/ Alien Certification Activity Outputs
Learner Certification Activity Outputs
Defense Manpower Policy Issuance #4 Activity Outputs
Labor Market Information Outputs
Farm Labor Wage Survey Activity Output

Exhibit 5-6. Relationship of Legislatively Mandated Outputs to USES Objectives

5.4 COMPONENT WEIGHTING

In order to establish component weights which are subjective in nature it is necessary to follow a specific and orderly process of evaluation. As earlier defined, a definite relationship exists with USES objectives and the model outputs. A necessary first step, then, is to establish a ranking of all USES objectives. This can be achieved by utilizing a panel of knowledgeable evaluators. After a specific ranking is achieved, the order objectives can be scaled. Using the "Delphi" technique a logical value can be established for each objective. Then, by summing the total weighted objectives which are related to activities, and summing the corresponding activity weights, a total value for a component of the model can be established. This procedure was followed as part of the test and is discussed in detail within Chapter 6.

6.0 DEMONSTRATION OF PRODUCTIVITY MEASUREMENT SYSTEM

6.1 INTRODUCTION

During earlier phases of this project considerable effort was expended to establish a structure for the measurement system; to formulate the various measures; and to develop the means of collecting, analyzing, and presenting the results. The last phase of the contract involved the conduct of pilot or feasibility tests in four local offices and the refinement of the model based on their results. The pilot studies provided an opportunity to test the actual availability of data and to make adjustments to the model, moving it from a conceptual status toward an operational status. The results of the pilot studies, their impact on the conceptual model, and the finalized version of the model are presented in this chapter. Specifically, this chapter includes: the description of the structure of SESA activities, outputs, and objectives; a discussion of the technique used to establish values for SESA services; descriptions of applicant, employer, and agency data; and a discussion of the methodology for model operation.

6.2 STRUCTURE OF SESA ACTIVITIES

Considerable discussion has been directed in previous chapters toward alternative structures for use in the PMS. It is appropriate to summarize the alternatives considered, to discuss in detail those which were most appropriate, and to present the rationale for the selection of the final structure.

Within these earlier discussions a detailed description of the six alternative structures was provided to demonstrate the relationship of one to another. The documentation of this set of relationships was particularly important, for it allowed each activity level to be utilized during the pilot study while retaining the ability to compare

results. The six levels presented were:

- A single measurement structure derived as the aggregate of all activities. This structure exists at the same level as the Resource Allocation Formula.
- The functional activity code structure of the SESA accounting system Time Distribution Subsystem at the broad band level.
- The functional activity code structure of the SESA accounting system Time Distribution Subsystem at the detail band level.
- A new functional activity code structure based on the SESA accounting system Time Distribution Subsystem but at a subdetail band level.
- A new code structure based on specific activities defined for the Productivity Measurement System.
- A new code structure based on specific subactivities defined for the Productivity Measurement System.

The pilot studies provided an opportunity to test the structure. Data was collected for the most detailed structure first, and, as each successive office was studied, a less detailed structure was used, until the most appropriate level was identified.

The structure which offered the greatest detail, the subactivity level, was used first. Time spent on each subactivity was reported at five minute increments utilizing the Time Ladder approach. SESA employees were allowed to combine report elements where the reporting of detailed time utilization was not practical. The results of the studies, as shown by the time ladders and the employee comments, demonstrated that the structure was too minutely detailed. Activities occurred in small time increments, and employees were often performing two or more activities concurrently.

Time reporting was cumbersome, interfered with agency operations, and was often inaccurate because of the requirement for detail. After one day of study the structure was abandoned and the next level of detail substituted.

This level of detail, the activity level, was utilized at two separate local offices. The first office was small in size, and employees were required to perform diverse functions. Order taking was performed by interviewers, and virtually no specialization existed. Other programs such as CETA and WIN were also administered by the office. The second office was highly specialized, and a distinct separation existed among interviewers, counselors, employer specialists, and order takers. Little difficulty was experienced with either office utilizing the structures with time ladders, however, the lack of activity reported within specific areas demonstrated the insignificance of a number of the activity categories in the PMS. Minor difficulties also occurred in the utilization of the structures for employees dealing directly with applicants.

The activity level structure was modified to provide a system that was a combination of the activity level and the subdetail band level. This modification was made both to improve the structure ucilized earlier and to facilitate the use of job tickets instead of time ladders. The amount of time spent with each applicant was recorded on job tickets. This system was utilized in two separate local offices, and the results demonstrated that the structure is workable. However, the need for additional modifications was also evident. For example, while job tickets allowed for reporting time in increments of less than a minute, it was felt that the significance of these increments was minor and that a broader code structure would be appropriate.

In analyzing the test it is necessary to answer several questions. First, what is the relationship of the detailed structure to the measurement of productivity? Secondly, how significant is the relationship when the

difficulty of implementation is considered? The answers to these two questions are of paramount importance in the selection of the final structure.

Obviously the more detailed a structure the more sensitive it is to specific conditions within an office. For example, a system which identifies food stamp activities, as opposed to one which aggregates food stamp activities with other activities, will provide additional information to the analyst. However, the number of unusual conditions and subactivities at each location make it virtually impossible to isolate each action involving an individual. Attempting to do so detracted from the ability to focus on major activities.

These factors considered, it is appropriate to remain within the structure of the detailed band of the Cost Accounting Time Distribution subsystem for the initial implementation. This provides a basis for rapid implementation when the PMS is installed on a pilot basis. To the extent that the system is considered successful, modifications can be made within the existing structure to provide more sensitive measures. These modifications are discussed in Chapter 7.

Because of the above relationship it is worthwhile to compare the structure defined here to the structure recommended for adoption by USES as part of a project to review the SESA Accounting System. The recommendations include the combining of the codes into essentially six summary level codes. While there is no doubt that difficulties occur when time is accounted for at a detailed level, without such a structure little analysis if any can take place. Conversely, to attempt to measure productivity at the summary level would be of limited value since important variations would be concealed. When the Cost Accounting System and the Time Distribution Subsystem are to be used as funding vehicles every

effort should be made to insure that Time Distribution reports are not prepared solely to maximize benefits which may be gained from reporting particular activity within the performance assessment formula.

6.3 STRUCTURE OF SESA OUTPUTS

The necessity to measure specific outputs corresponding to the various SESA activities is apparent. During the conduct of the study the numerous alternative measures discussed in Chapter 4 were considered. Two major considerations exist in the selection of output measures. First, the measure should be an objective measure of activity capable of measuring the same activity at different locations. Secondly, the measure should be readily obtainable, preferably through the use of existing data systems.

The pilot studies provided an opportunity to test for availability of data in local offices. Data availability depends to some extent upon the specific information procedures utilized in the state. Where output measures were defined as specific ESARS items, no problems occurred. ESARS normally was prepared for input into the system at the end of the day. Since this data was input at approximately 3:00 p.m. each day, care was exercised to ensure that the counts were allocated against the proper day. Other output measures were not as easy to handle. Counts of selection interviews had to be handled on an individual basis with some loss of accuracy. It will enhance the PMS accuracy if counts are compatible with those currently made for the existing system.

A finalized SESA output structure was developed through an "on-site" analysis of those alternatives outlined in Chapter 4 of this report. These alternative structures were refined during the pilot study. The measures of output are shown in Exhibit 6-1. The data is readily available since it is either collected in support of ESARS or routinely but unofficially tallied as part of local office operations. The PMS can be readily computerized where the data is an input to ESARS.

ACTIVITY	OUTPUT MEASURE	SOURCE	COMMENT
Outreach	New Registrants	ESARS Table 11, Cell 11010	
Reception	L.O. Contacts	ESARS Table 11, Cell 11010	
Interviewing	New Registrants & Renewals	ESARS Table 11, Cells 11010 & 11015	
Counseling	Counseling Transactions	ESARS Table 11, Cell 11030	
Testing	Testing Transactions	ESARS Table 11, Cell 10035	
Other (Misc.)	None	-	Allocated Against Other Categories
Training	Referrals for Training	ESARS Table 11, Cell 11070	
Job Order Taking	Orders Taken	ESARS Table 7, Cell 07015	
Selection Interviewing	Referrals	ESARS Table 11, Cell 11130	
Employer & Union Services	None	-	No Satisfactory Measure Identified
Employer Technical Services	Employer Visits	Available at Local Office	Allocated Against Other Categories
Immigration	Certifications	"	"
Community Services	None	"	"
Labor Area Information	None	"	"
Occupational Opportunities	None	"	"
Operations Research	None	"	"
Test Development	None	"	"
Management & Supervisor	None	"	"

Exhibit 6-1. Measures of Output

6.4 ESTABLISHMENT OF THE PRODUCTIVITY RATIO WEIGHTS

In response to the study requirement to provide a means of "combining and weighting" productivity ratios to develop a single overall productivity ratio, ASD/ASSI set out to define the specific objectives for SESA's and, based on the relative importance of the objectives, to combine and weight the corresponding productivity ratios. As discussed in Chapter 5, the PMS rationale assumes that USES desires that certain emphasis be placed in each of the four major program areas--Applicant Processes, Employer Processes, Job Matching Processes and Other Legislatively Mandated Programs. The question to be answered is, what emphasis, or weighting, should be placed on each of the individual areas.

The technique used allowed the top administrators of USES and SESA to determine subjectively the weights to be placed in each of the four processes. The values were to be established after considering the objectives. The actual weight, however, was totally subjective.

The DELPHI technique, (discussed in Section 2.4) was proposed to be utilized. Since it was the intent to only demonstrate the concept of weighting and not evaluate the DELPHI technique, no attempt was made to narrow the responses. A rating form was passed out to fifteen top DOL/USES administrators. Thirteen of those who received the form responded.

The results of the valuations were interesting in that administrators appeared to agree on the major objectives, while opinion was widespread on some of the less important objectives. The range of opinion was broad even for an objective such as "Reduce Transfer Payments" which is quite possibly the area of greatest impact for the Employment Service. The results of the "survey" point up a real need to develop a better agreement of USES objectives among the top administrators. Weightings assigned to each of the four process areas by the respondents showed opinions to be widespread. All evaluators felt that job matching was an important

process, but judgements of its relative importance covered a wide range. Opinions as to whether the major emphasis should be directed to the applicant or the employer fluctuated widely, pointing out the dilemma of "who is really served by SESA's, the applicant or the employer". Since the responses were obtained from top administrators the results reflect diverse perspectives which have a major influence on DOL/USES policies.

The results of the evaluations are shown on the following pages. Exhibit 6-2 shows the ratings made by the thirteen evaluators of the USES objectives. (The respondents rated the importance of each objective on a scale of 0 to 10.) Exhibit 6-3 shows the weights placed on the four USES process areas by the evaluators. The actual emphasis as reflected by the amount of effort expended by local operations in each of the four pilot offices is shown in Exhibit 6-4. The focus of effort was developed through the actual distribution of time as found in the four offices studied. These variations do not appear to be attributable to state policy decision, since local offices A and B, and C and D are from separate states.

6.5 DETERMINATION OF VALUE ADDED

The concept of placing a value on specific outputs of the Employment Service was adopted early in the project. However, the practicality of determining and measuring values of SESA outputs proved most difficult. Early in the project it was suggested that a measurement system could be utilized to identify the relative level of employability of an applicant upon entering the system and when leaving the system, the difference being the value added. This difference could then be related to a cost factor. The ability to obtain "before" and "after" measurements were important features of the system.

Measures must be sensitive to the services provided. This "need" led to a consideration of the relationships of applicant characteristics to

OBJECTIVE	EVALUATOR													Average Rating of Objective
	1	2	3	4	5	6	7	8	9	10	11	12	13	
IMPROVE INTERNAL OPERATION	6	3	4	5	8	5	0	4	3	6	4	3	5	4.3
IMPROVE RESPONSE TO LEGISLATION	5	5	8	5	2	4	1	5	5	4	5	5	5	4.5
IMPROVEMENT IN NON-ECONOMIC FACTORS	3	5	9	9	6	4	1	8	5	5	7	6	7	5.8
REDUCE TRANSFER PAYMENTS	9	9	1	7	6	9	5	5	2	7	6	4	9	5.6
IMPROVE RESOURCE ALLOCATION	8	7	2	4	8	7	5	7	7	8	3	7	6	6.1
REDUCE JOB MATCHING COSTS	7	7	2	4	7	8	5	3	5	1	8	8	9	5.7
REDUCE INCIDENCE & DURATION OF UNEMPLOYMENT	10	10	10	10	8	10	10	9	8	10	9	10	10	9.5

Exhibit 6-2. Evaluator Ratings

SESA PROCESS	EVALUATOR NUMBER													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
JOB MATCHING	40	*	35	50	50	35	90	35	35	50	65	30	50	47
APPLICANT	15	*	35	30	20	35	6	35	20	8	10	25	25	22
EMPLOYER	40	*	15	10	20	26	3	30	35	35	15	30	20	23
OTHER MANDATED	5	*	15	10	10	4	1	0	10	7	10	15	5	8

Exhibit 6-3. Significance Attributed to SESA Processes

SESA PROCESS	OFFICE STUDIED				
	A	B	C	D	Average
JOB MATCHING	48	20	39	71	45
APPLICANT	45	51	26	22	36
EMPLOYER	5	28	34	7	19
OTHER	2	1	1	0	1

Exhibit 6-4. Percentage of Time Spent for SESA Processes

the value of the SESA services provided. If, for example, it could be determined that certain characteristics were related to the value obtained, then statistical techniques could be used to develop an estimate of that value. Since ESARS maintains a comprehensive listing of applicant characteristics, the two could be tied together so that an agency receives credit based directly on the characteristics of the applicants they serve. What remained to be determined was the relationship between the characteristics and the service value. If the objective of the ES is to place applicants in jobs which are of the greatest value to the individual, then this is a viable alternative. In effect, what is important is to place those applicants into jobs which are of the greatest value to them at the minimum cost to the agency. Thus the SESA's would serve that segment of the labor market wherein the greatest return for the dollar is found. Once again this important element of the system finally would be dependent on the ability of the USES to better define its objectives.

The assignment of a value to some of the services to the applicant is a subjective process. Like the values for USES objectives, a panel of experts could have assigned values to specific activities and to specific groups of clients within activities based on their relative importance. Without considering the difficulties of that task, consider for a moment the concept. Specific activities provided are of more value to one group than another and some activities of more importance than others. This approach is reflected in the Resource Allocation Formula. Credit, via the RAF, is given for services provided to specific groups. Since the RAF is a funding source, logically productivity should be measured in similar terms if the funding is, in fact, based on an extension of USES objectives.

The selection of one technique over the other involves more than a personal preference. From the perspective of work measurement, productivity represents an increase or decrease in value, not a policy question.

However, the impact of the measure must also be considered. If agencies attempt to increase productivity, and their success adversely affects their funding, a negative incentive exists. If productivity is measured in terms of the value added to applicant, then the funding source must be modified to reflect this as well.

6.6 APPLICANT CHARACTERISTIC DATA

The availability of applicant characteristic data is of obvious importance in the determination of the outputs of the SESA's, since data must be available coincidental to the measurements of inputs. A review of the ESARS applicant registration card, ES 511, confirmed that a complete profile of the applicant was obtained during the registration process. Since this form has been adopted by all states with minor modifications, a uniform tool to collect applicant characteristics is available. A complete list of the data items is shown in Appendix E.

The specific data is obtained at the time of the initial applicant visit. Normally at the close of the work day the information is transmitted to a centralized point for input onto the ESARS computer files. The data base also includes services provided to the individual including testing, counseling, referrals and placements. Thus a complete listing exists by individual: characteristics, services provided, and results of those services. This data can be accessed at several levels. For the purposes of this pilot test the data was obtained prior to transmittal to the data processing point. However, this data is available from monthly summary reports, from a 2% sample drawn at random over a year's period, or, on an ongoing basis directly from the computer.

6.7 EMPLOYER CHARACTERISTIC DATA

The availability of employer characteristic data was also of interest.

Generally, employer data is maintained by each local office in manual files. There is no uniform format for the collection of this data in USES. As a result, each state agency maintains data on items it feels are appropriate for its needs. In reviewing this data base it was apparent that the accuracy of the information would be of major concern. The status of such factors as employer turnover rares, occupational needs, and size will vary, and it is a difficult job to maintain current files. Records are brought up-to-date only when visits are conducted to the employers. Consequently, utilization of this data would be difficult. A system to maintain employer data in support of the PMS and other SESA activities is discussed in Chapter 7.

Other data concerning the employer usage of SESA services is available through ESARS. Job orders placed and the status of such job orders are maintained within the ESARS system. This information is readily available at the same points described earlier. A summary of the data items available is provided in Appendix E.

6.8 METHODOLOGY OF DATA COLLECTION

A complete description of the methodology for data collection is presented in Appendix F. It is convenient here to summarize the approach for data collection and to describe the results of the pilot tests.

The study design utilized a combination of work measurement techniques in order to identify the distribution of time among a variety of client and employer related activities. Incremental times spent processing applicants were also identified in order to relate the services provided to the value added for the clients receiving services. The latter data serve as a basis for developing client values based on the services provided and the client characteristics.

The study design utilized two work measurement techniques which in combination provide a comprehensive description of the agency activities.

The job ticket technique is client based, that is, it is a technique used to measure the cumulative time expended on specific individuals as they proceed through the system. The work sampling technique on the other hand is utilized to measure those services which are provided but that might not be related to a specific individual. Units of output are counted at specific points within the office.

6.8.1 Input Data Collection

The input data collection effort require a detailed structuring of SESA activities. This structure, presented earlier, was coded for use in the study. The procedures required to utilize job tickets were quite simple. At the reception desk a job ticket was attached to each applicant record. A central log, controlled by occupational code, was maintained to track tickets. As services were provided to the applicant the amount of time expended was recorded. The completed job tickets were picked up at the end of the measurement period.

Some support activities and employer services were included in the time ladder approach rather than the job ticket study because of practical operational considerations. At randomly selected times during each day, each employee was observed and the specific activity being conducted at that instant was recorded. The results were summarized and utilized to determine the distribution of time for these support activities.

6.8.2 Output Data Collection

The collection efforts for output data utilized both the current reporting system for ESARS and appropriate manual points established within the offices. The manual collection points were established within local offices based on their specific internal data collection procedures. Arrangements were made to obtain copies of all production reports at the end of each day. Since these normally were transmitted several hours before the end of the day, adjustments were made for work

provided after transmittal. This was done by adding each previous days activity after 3:00 to that of the following day.

In addition, specific count points along the flow of activity were established for other workload items. Count points were required because a time lag existed between the work performed and the count. An example of this is the relationship between placements and placement counts. Normally, placements accomplished are not verified until the following Monday, the normal start time. Thus, a special count had to be established for this data. This time lag will create a problem in implementing the PMS, unless a procedure is used to normalize these counts or they are accepted on a delayed basis.

6.8.3 Calculation of Value Added

A long term study objective is to develop a historically valid means of calculating the value added for SESA services (described in the next chapter). However, for the purposes of the pilot studies a subjective means of calculating the value was utilized. The technique used established a value for each service based on the applicant need for that service. For example, an applicant with a high school education has less need for service than one who does not have that education. Also, an interview is of more benefit to a new applicant than to the renewal or the active applicant. As an extension of this concept, a scale was established for the applicant services using, for this demonstration, a range of 0 to 10. This scale is shown in Exhibit 6-5, on the following page.

The initial value assigned for each applicant was determined by utilizing the ESARS data collected for each applicant. For example, when an active applicant, a high school gradudate, came into the office and was referred but not placed, the office earned 1 point. When a new applicant with an eight grade education was registered and referred but not placed, the office earned 4 points.

LESS THAN 12TH GRADE EDUCATION				12TH GRADE EDUCATION OR MORE			
Type Application	Registered	Referred	Placed	Type Application	Registered	Referred	Placed
New	2	4	10	New	1	3	9
Renewal	1	3	9	Renewal	0	2	8
Active	0	2	8	Active	0	1	7

Exhibit 6-5. Value Added Scale

The productivity for the applicant process is, then, the ratio of value earned to the effort expended in minutes. Recall that productivity is $\frac{\text{OUTPUTS}}{\text{INPUTS}}$, and performance is $\frac{\text{CURRENT PRODUCTIVITY}}{\text{BASE PERIOD PRODUCTIVITY}}$.

Performance was measured over a three day period utilizing this approach. The measurements were made at a large and small office within one state and two medium sized offices in a second state. Utilizing the first day as the base period, productivity was shown as follows:

Base Period Productivity Index	.239
Second Day Productivity Index	.353
Third Day Productivity Index	.301
Performance, Base Period	100
Performance, Second Day	148
Performance, Third Day	126

The results of the pilot study are shown in Exhibit 6-6. Since the period examined was too short to be significant, further details are omitted. The pilot study results document that different levels of service are required for particular groups of clients. The study was made at two similarly sized offices within one state who were serving a somewhat different client set. This hypothesis was tested for several classifications. These results in Average Amount of Service Time Provided are shown in Exhibit 6-6.

CLASSIFICATION	AVERAGE SERVICE TIME	N
UI RECIPIENTS	22.33	79
NON UI RECIPIENTS	25.01	73
MALE	24.84	82
FEMALE	22.87	72
APPLICANT REFERRED	24.62	86
APPLICANT NOT REFERRED	22.82	68
WHITE	24.13	47
BLACK	24.38	100
NEW REGISTRANT	25.75	64
RENEWAL	22.65	46
ACTIVE	22.71	42

Exhibit 6-6. Average Service Time by Selected Classification

It is important to recognize that this data was collected over a relatively short period and is not conclusive but it does demonstrate that the mix of applicants can affect the resources required by the agency to deal with them and, correspondingly, the productivity.

The amount of non-productive time observed in the pilot offices varied in direct proportion to the amount of time spent with each applicant. This in all likelihood would also affect performance and quality of service to the public.

Although the study durations were extremely short, (only 2 to 3 days per office studied) the results demonstrated the viability of the technique. These results suggest that further more comprehensive studies must be performed and evaluated in order to validate or discredit these preliminary results.

7.0 REQUIREMENTS FOR PMS IMPLEMENTATION

We have discussed the development of the PMS and the results of the feasibility tests. The concept of value added stands as a major element which requires further development. The subjective system used for establishing a value for test SESA outputs was arbitrary and interpretive and not necessarily representative of the desired value.

Other PMS option considerations to be addressed prior to implementation are discussed in this chapter. Included in the discussions within this chapter are the development of a data base and an experimental design to identify the specific values of SESA outputs for both the employer and the applicant. The anticipated results, the development of an employer record system, the feasibility of automation, and applications for the PMS are also discussed.

7.1 DATA BASE DEVELOPMENT

The determination of an empirical value added to applicants or employers as a result of services provided by the SESA's requires the construction of a data base of potentially significant variables. These can be separated into six areas--employer characteristics, applicant characteristics, agency characteristics, agency costs, agency level of services, and agency unit times for services. Variables of interest within these classifications are presented below.

7.1.1 Employer Characteristics

Little if any data is available currently concerning employer characteristics that might be of value to this study. If value is added to an employer then it can be attributed to one or more of the following areas. First, the employer requires a smaller staff or capital outlay for handling personnel matters. Second, the employer realizes greater productivity through a reduction in turnover rate. Third, the employer has a reduced unemployment insurance rate through better planning and reduced lay-offs. These and other less apparent employer benefits

are difficult to quantify. In the model construction, it is desirable to identify those employer characteristics which might affect the value of services provided by the Employment Service. Within this framework, cost related variables are dependent variables. Those related to employer or client characteristics are independent variables. The independent variables are hypothesized and their significance can be determined by multivariate analyses. Such significance could be established by examining data collected from 20 local offices over a 30 day period.

Those deemed to be significant are discussed below.

E_1 - Employer Size. This variable shows the size of the employer at the particular location served by the ES. Many small employers would lack the staff in-house to perform ES related services. These employers would be more likely to utilize the ES or outside placement agencies to supplement their own staff.

E_2 - Distribution of Worker Skills. This variable shows the class of worker utilized by the employer. The ES is thought to provide services more to a segment of the labor market. Unskilled or semi-skilled workers are the more common class of labor available through ES to an employer, thus the employer utilizing these workers would be better served by the ES.

E_3 - Migrant Workers. This variable is similar to E_2. Employers utilizing migrant workers would be more dependent upon the ES to provide workers.

E_4 - Seasonal Workers. This variable is similar to E_2. Employers utilizing seasonal workers would be more dependent upon the ES to provide workers.

E_5 - Union Affiliation. This variable would measure the degree of union affiliation within an employer's work force. An organization totally unionized would have less need for ES services since much of the hiring would be done through the union hiring hall.

E_6 - Turnover Rate. This variable measures the actual turnover rate of an employer regardless of cause. An employer in a traditionally high turnover industry classification might have a greater need for ES services.

E_7 - Quit Rate. This variable is a subclassification of E_6. An employer experiencing an abnormally high quit rate might have a greater need for ES services.

E_8 - Organizational Structure. This variable identifies the type of organization. Establishing the relationship between the organizational structure and the value of services would require "typing" organizational structures into specific categories.

E_9 - Government Contract Work. This variable would measure the extent to which an employer is dependent upon government contract work and thus subject to the mandatory listing requirements.

E_{10} - Years in Business. This variable measures the number of years an employer has been in business and is then indirectly a measure of the maturity of the organizational structure. An older organization might be less dependent upon outside assistance.

E_{11} - Standard Industry Classification. Many industries historically have a greater use for the ES. Restaurants and hotel industries are heavy users while highly technical classifications are less dependent.

E_{12} - Ratio of Personnel Staff to Total Employers. This ratio measures indirectly the extent to which an employer is dependent upon ES and outside agencies for personnel services.

E_{13} - Proximity to ES Local Office. This variable measures the desirability of an employer from the perspective of an applicant. The greater the distance from the local office, the less favorably job opportunities will be viewed by applicants who are generally from the immediate ES local office area.

7.1.2 Applicant Characteristics

A vast amount of data concerning the applicant is readily available through ESARS. The value added to an applicant can be defined through increased earnings as a result of a better placement or reduced duration of unemployment. Such changes can be measured. However, it would be unrealistic to attempt to measure this value for each applicant or even to attempt to measure this value for a sample of applicants on a regular basis. Rather, if a relationship can be established between the characteristics of an applicant and the value added as a result of ES services performed, holding constant such things as quality, this would then become a basis for estimation of the value added in the PMS. We discuss below the many applicant variables and some of the reasons they might be significant.

A_1 - Applicant Type. This variable identifies the classification of the applicant. A fully registered applicant is more likely to benefit from ES services than a partial

registrant. A renewal will not receive the attention of a new applicant and, as a result, it is likely that changes in interests and objectives will not be accurately identified.

A_2 - Sex. Certain programs available through ES are directed at female applicants making it likely that the value of services received from the program is greater for women than for men.

A_3 - Age. Again certain programs are available for youth groups. Also it is likely that older workers might receive greater benefits from specific services available to them.

A_4 - Military. Again certain programs are available for veterans which can greatly enhance their job opportunities.

A_5 - Citizenship. Specific program requirements make the processing of aliens more difficult. It is likely that ES services are of less value to non-citizens.

A_6 - Dependents. The provisions of the ES program calling for referral of applicants to non-SESA services such as AFDC, child care services, and others make the services available of possible greater value.

A_7 - Applicant Tools and/or Licenses. This characteristic makes an applicant easier to place, since a larger number of job opportunities are available.

A_8 - Relocate. This characteristic as A_7 above affects the ability of ES to place an applicant.

A_9 - Union Member. An ES registrant who is a union member has a more restricted job market available to him. Further, his union affiliation makes it less likely that he will avail himself of the services available to him through the ES.

A_{10} - Education. This variable is thought to be inversely proportional to the value of ES services. The higher the education level, the less likely that ES services would be of value or would be utilized by the applicant.

A_{11} - Special Schooling. This variable measures technical schooling. The applicant with this background is more job ready and will benefit less from ES services.

A_{12} - Occupational Classification. This variable is recognized as a significant factor in determination of ES services.

7.1.3 Agency Characteristics

Other important data concerning the agency operating procedures and characteristics are readily available with a minimum of effort. We discuss below some of the more important agency variables and some of the reasons they might be significant:

M_1 - Unemployment Rate. This variable has obvious importance in the ability of the agency to place applicants. It could, in fact, change temporarily the objectives of an agency from one of placement to one, at least partially, of counseling applicants to the current economic situation.

M_2 - Computerized Job Matching. This variable can have a significant impact on the amount of service time required and the expected outcome of those services.

M_3 - Private Market Intermediaries. This variable can have a significant impact on the demand for ES services in certain occupational categories.

7.1.4 Cost Data

Cost data is readily available through the Cost Accounting System. The data is available by major activity code, for example, the cost per man year for Community Services. These figures represent, however, a level of aggregation which may not be desirable. It has been suggested by Englander [6/] that it may be more appropriate to determine the cost on an individual basis reflecting the classification, the grade level, and experience for employees in each office or even for each client processed. While comparisons on a local basis could benefit the state, it is questionable whether this level of detail would be of benefit for national comparisons.

The Cost Accounting System Reports 61, 92 and 96 are required to compute the average daily cost for a particular type of funded activity. The cost per man-year is equal to the Total Funded Costs (personal services and annual leave taken divided by the number of man-years paid.) However, this calculation cannot be directly obtained using the information available. Instead, cost per man-year can be calculated using the information contained in these reports by annualizing the average daily cost per position. To obtain the average daily cost per position, the monthly cost per position must first be compared using Reports 61, 92 and 96.

7.1.5 Agency Level of Service Data

The level of service provided to each applicant or employer is significant if a correct service value is to be ascribed. Data describing the amount of service can be utilized to determine if a relationship exists between that and the value added to the client. For example, a relationship between the number of referrals for an applicant and the value of that placement would be highly significant.

6/F. Englander, Ph.D., Op.Cit.

To identify such a relationship, data on the level of service by individual applicant or employer would be required. This data is available through the ESARS system. Each contact with an applicant is reported on ES-516 and input into ESARS. The data on this form includes testing, counseling, referrals, job development contacts and other data including the specific job order to which the applicant is referred.

Taken together with the specific amount of time spend with an applicant, the data above provides a comprehensive base for regression analysis.

7.1.6 Agency Unit Times of Service Data

Unit times of service must be properly measured if the PMS is to be effective. A relationship does exist between the amount of time spent with a client and the results, however, the relationship is not linear. There exists a point of diminishing return. The testing of such relationships would actually be a side benefit in the development of the value added equation.

The pilot study confirmed the ability of a study team to collect unit times of service and to identify these values back to the applicant or employer who received the service. The job ticket technique was chosen for this purpose. This technique requires the attachment of a job ticket to each applicant registration card when the applicant enters the local office. As the applicant is processed through the system, the amount of time devoted to him and the service provided is recorded. The procedure for collecting employer unit time of service is similar in method.

7.1.7 Dependent Variables

The dependent variables for the establishment of the value added by ES services can be categorized into three major areas. These include the value added to the applicant, to the employer, and to society at large. In the model described, no attempt has been made to address the

value added outside of that which directly impacts the client since this is a most difficult concept to apply very broadly. However, value added to the applicant and to the employer appear to be susceptible to accurate measurement.

V_a - Value Added to Applicant. There are two commonly recognized values to the applicant. First ES services provide a better job in terms of increased earnings, benefits, potential, duration, and other factors. Second, ES services result in a reduced duration of unemployment. Identification of the reductions in the duration of unemployment which are attributable to the ES services would require analysis of both user and non-user groups. This is well beyond the scope of the experimental design for this study. It is argued by some that the ES might, in fact, increase unemployment durations under certain conditions. However, for the purposes of this design the duration, whether added or subtracted, will be assumed as uniformly acting on all applicants.

The value added to the applicant will be expressed in terms of the participants acquisition of a better job. This value expressed will be the difference in the wages before and after the period of unemployment. The starting wages are often not representative, and the possibility of developing a follow-up wage report to establish a better base should be considered. Utilization of the established values on a national basis would require that adjustments be made for labor market conditions and for area wage levels. Such adjustment would not be necessary during the establishment of the value added for ES services.

V_e - Value to Employer. The value of ES services to the employer is thought of as first, the value of personnel services which would otherwise be provided by the employer or performed by private agencies and paid for by the employer; second, the reduction in turnover rate which results in greater productivity; and third, reduction in unemployment taxes through a lower experience rating by reducing lay-offs. Again, while the potential significance of the latter two benefits are obvious, their measurement and inclusion are outside of the scope of the design. The assumption will be that these benefits are of relatively equal value to all employers served, thus, they will not be considered in the establishment of the value added to employers.

The value of services provided to the employer will be measured by determining the expenditures by employers both internally and externally for personnel services for both ES and non-ES users. The value of services provided to an employer is equal to the total cost of personnel services less the amount actually spent by the employer. The total costs of personnel services can be determined through a survey of the expenditures of employers who do not utilize ES. This is likely to be a function of many of the variables previously discussed. The amount actually spent by the employer would be collected at the time that ES services are provided. The difference can be attributable to the value of ES services provided to the employer.

7.2 EXPERIMENTAL DESIGN

The experimental design is intended to determine to what extent certain variables related to the applicant or employer affect the value of the

ES services provided to them and to develop a method of predicting the value of services (value added) utilizing certain basic data. This predicted value added can then be utilized in the productivity model in lieu of the admittedly subjective value assigned for services provided outlined earlier.

The dependent variables are, then, the values added to the applicants or employers, each treated separately. The independent variables are applicant and employer characteristics, agency characteristics, cost data, service data, and unit times for services data. The design is as follows:

$$V_a = K_a + A_aX_1 + M_aX_2 + C_zX_3 + S_aX_4 + T_zX_5 + E_a$$

and

$$V_e = K_e + A_eX_6 + M_eX_7 + C_eX_8 + S_eX_9 + T_eX_{10} + E_e$$

where:

V_a and V_e are the matrices of the values added to the applicants or employers,

X_{1-10} are the matrices of the applicant and employer related characteristics corresponding to the coefficients described below,

K_a and K_e are matrices of constants,

A_a and A_e are the coefficients to be estimated for the applicant and employer characteristics,

M_a and M_e are the coefficients to be estimated for agency operation data,

C_a and C_e are the coefficients to be estimated for agency cost data,

S_a and S_e are the coefficients to be estimated for services provided data,

T_a and T_e are the coefficients to be estimated for the unit times data and

E_a and E_e are estimates of the residual.

It is desirable to develop an equation from which the value added can be predicted as a function of readily available data. For example, by inputing the applicant's ESARS data into the equation, the value of a placement can be calculated. Other variables such as economic conditions can be used to adjust the value, or integrated into the base equation if this is justified. Further, the amount of service and the unit times for service will be used to adjust the values, if appropriate.

Different outcomes will result from the analysis and these are of sufficient importance to merit special mention. First, consider the relationship of the level of service to the value added. At what point does a referral result in a placement? Do more referrals increase placement potential or decrease it? Actually, there is probably a point of diminishing return beyond which additional referrals are wasted. This point can be identified and, as such, could be used to establish procedural guidelines for local office operations.

The second relationship of interest is that of the unit time for service and the value added. How much time should be spent with an applicant? Does additional time spent counseling or interviewing result in increased value? Again, there is a point of diminishing return which can be identified through the computation of productivity, given the base objectives are appropriately specified.

The third relationship is that of the characteristics of the applicant and the value added. Obviously, certain characteristics make an applicant more employable. But consideration must be given to the fact that the SESA's may be geared to handle the less employable primarily and that this is reflected in the job opportunities that are available.

Further, in terms of the measure of value added, the differential between past employment wages and current employment wages is likely to be greater for lower wage laborers than for those in higher wage categories.

The analysis should be conducted in all three areas, with specific factors controlled during certain phases. For example, when testing for the relationships of characteristics, unit times, and level of service, the sample should include only individuals who have received the same treatment. Tests can then be easily handled through multivariate analysis of variance. Once treatments are identified as significant, they can be included in the regression analysis.

The regression analysis should consider techniques to eliminate interdependency and to reduce the data set where possible. Variable regression analysis, including multiple correlations and factor analysis, should be considered.

As a result of the analysis an estimator for predicting the value added to the applicant or employer as a function of readily available characteristics will be established.

7.3 CURRENT PMS DATA AVAILABILITY

The Productivity Measurement System, in order to be a viable system, must be based on objective measures, supported by readily available data, and sensitive to changes over a short time period. Conceptually, the features are available within the system proposed.

7.3.1 Value Added Estimates

The concept of value added to the applicant or employer by the ES is one of the most significant features of the PMS. To date, the value of ES services has been estimated. The estimated value is a function of characteristics judged to be significant and of comparable value to the importance of that service to the client. This subjectivity is acceptable to demonstrate the concepts of the PMS but not acceptable if

USES desires an objective system that can be utilized for measurements of productivity both internally within an agency and externally among agencies. The development of estimators of value based on the values of services provided to clients in the past is a necessary part of the long term development of the PMS. It is important to also identify other benefits to USES in undertaking this task.

The determination of the value added to an applicant by service provided or by the amount of service provided could have a profound impact. Testing could be determined to have no value for specific classifications of applicants. The amount of counseling could be shown to reach a point of diminishing return. Longer referral interviews could be shown to increase referral to placement ratios. These, to name a few, could have a significant impact on program planning.

7.3.2 ES Employer Record System

Each state must of necessity maintain certain basic information on the employment habits and characteristics of the employers they serve. This data ranges from SIC codes, size, type of labor force, and location to informal comments on whom to contact, intangible benefits, and other significant information. This information is generally maintained at the local office where the employer services originate. The files are maintained on a manual basis, and no systematic effort is made to update them.

The Unemployment Insurance Service maintains employer files as well. These files are maintained in support of the UI tax program. The rate at which an employer is taxed is based on his past history of lay-offs. Further, each employer is required to file a quarterly return which reflects the size of the payroll and other significant information. These files are normally maintained at the central office on a computer file.

The establishment of the value added to an employer would draw heavily on the two data bases described above. Further, there would exist a need for the collection of additional data to support the model design. To what extent the information required is available depends on the labor market selected for the study itself.

As an aside, it is worthwhile to mention that one of the critical problems which face SESA's today is their ability to get new job orders. Most offices have depended heavily on past participating employers. Their ability to attract new employers has depended upon their ability to remove the past image of the agency of handling only the ill-qualified, unskilled, hard core of the labor market. Local offices lack good information on the employers they serve. In order to penetrate the employers who have shunned the ES in the past it is desirable to develop current and comprehensive information describing the employers' needs. Computerized job matching is only as good as the ability to develop job orders. If an agency would maintain current data on the employment characteristics of the employers it serves and effectively utilize this data to develop job orders, a significant increase in placement rates will result.

7.4 AUTOMATED PMS

It is obviously desirable to create a system which lends itself to automation. The Productivity Measurement System is no exception. In order for the PMS to realize its full potential it must be automated. The PMS should be capable of generating productivity indices on a cost center basis each month. In this manner data will be available to cost center managers on a timely basis, and corrective action can be taken.

Certain types of reports should be included in the design of an automated reporting system in support of the PMS. (Reports should be provided at a cost center and agency level.) At the cost center level productivity ratios should be presented both for the current reporting period, (preferably monthly) and for the year to date. A sample report

is shown in Exhibit 7-1. The report should also allow a comparison against the agency totals, both current and year to date. Further, in order to identify the cause for variations for purposes of corrective action, a component deviation should be provided. This would show the cause of the increase or decrease as a function of the productivity base. For example, if the productivity index denominator was based on a cost per man-year of $10,000, but that for the current period was $11,000, the input component of the ratio increased by 10%. Thus, corrective action to decrease costs would be indicated. If the productivity index numerator was based on an average value added per counseled individual of $1,000, but the current period showed $900, the output component would show a decrease of 11%. Thus, the corrective action indicated might be to more carefully screen applicants and counsel only those who will receive the greatest benefit from the service provided.

The agency level report should provide a summary of all cost centers. A sample report is shown in Exhibit 7-2 which would allow the identification of problem areas within the cost centers. An agency report, similar in format to the cost center report, should also be provided summarizing the productivity ratio for the entire agency.

It is not difficult to conceptualize a PMS reporting system nor to recognize the value it could have for managers at all levels in identifying the causes of productivity changes. The difficulties lie in establishing a system of data collection to support the reporting system. To the extent possible, this system should be tied to existing systems. We discuss the components of the PMS below in light of the problems of automation.

In terms of investigating the potential for automation of the PMS it is convenient to segregate the system into four components -- the value added subsystem, the output level subsystem, the costs of ES service subsystem, and the input level subsystem. These four subsystems would provide the data necessary to support the PMS.

PRODUCTIVITY MEASUREMENT SYSTEM

APPLICANT PROCESSES

	COST CENTER		AGENCY		COMPONENT DEVIATIONS	
	CURRENT	YEAR TO DATE	CURRENT	YEAR TO DATE	INPUT	OUTPUT
OUTREACH	1.302	1.171	1.203	1.381	-1.201%	.002%
REGISTRATION	1.703	1.623	1.408	1.515	- .017%	1.013%
INTERVIEWING	.892	.971	1.001	.997	1.701%	.001%
COUNSELING	1.013	1.118	1.101	1.099	1.103%	1.101%
TESTING						
ORIENTATION						
REFERRALS						

EMPLOYER PROCESSES

Exhibit 7-1. Sample Cost Center Report

PRODUCTIVITY MEASUREMENT SYSTEM

APPLICANT PROCESSES	COST CENTER 001	002	003	004	005	006	007	008	009	010	Agency
OUTREACH	1.302	1.001	.891	.971	1.003	1.413	1.101	.871	.977	1.000	1.203
REGISTRATION	.971	1.813	1.111	1.091	.914	.989	.871	1.071	1.907	1.141	1.408
INTERVIEW											
COUNSELING											

Exhibit 7-2. Sample Agency Report

The "value added" subsystem would collect data on the characteristics of the applicants and employers served and would establish a value utilizing a formula that was developed through regression analysis prior to implementation of the system. The subsystem would only require data concerning characteristics of those served by the ES during a preceding time period, for example, a month. This data would be readily available through ESARS for the applicant processesed, and no difficulty would be encountered in automating this subsystem. However, no data collection system currently exists for employer characteristics. A system to collect, maintain and update significant characteristic data for employers would need to be developed to support the model, perhaps through a revision of the job order form.

The "level of output" subsystem would collect data describing the outputs of an office. These outputs need not be tracked by individual client in order to calculate the value of services provided. Rather, the total output units produced in each category is all that is necessary. Currently, output data is collected through ESARS. However, the model requirements would necessitate some supplemental counting and reporting of outputs. This requirement is, again, most significant in the employer processes. Conceivably, the output reporting system could be tied to the employer records system discussed in Section 7.3.2.

The "cost of services" subsystem currently provides data on the cost per man-year for personal services and support services for the agency. In addition, it is possible to identify the costs of specific funded activities for the agency. A more detailed cost of service figure based on the cost center of PMS activity structure is desirable. In order to achieve a more detailed breakdown, a revision to the current cost reporting system would be required. Although such a revision might be feasible, substantial variations in costs per man-year may not exist on a cost center basis and, even if they did, the difficulty in tracking them through the system would offset the gain in the sensitivity to the model.

The "input level" subsystem measures the utilization of time in providing the various ES services. This system cannot be supported by the existing Time Distributing System (TDS), since it is not accurate enough for use in the PMS and it utilizes a broader structure. To support the PMS a system of time data collection must be utilized which will accurately break out time expenditures according to the structure of the PMS. This system could be established by imposing a requirement to collect time in the local offices according to the detailed structure. Such reporting could be integrated into the TDS requirements and improve the accuracy of that data as well. This would minimize the additional reporting requirements for the state.

Overall, the requirements to automate the PMS are realistic. Much remains to be done prior to actually determining the feasibility of automation, but it stands as a realistic and attainable goal in light of expected benefits.

APPENDIX A. PROPOSED SUBACTIVITY CODE STRUCTURE
(ALTERNATIVE VI)

1.0 CLIENT SPECIFIC LABOR MARKET EXCHANGE FUNCTION

1.1 Applicant Process Activities

1.1.1 Outreach Activities

1.1.1.1 Promotion, e.g., Job Fairs
1.1.1.2 Advertising
1.1.1.3 Mandatory Referral Arrangement
1.1.1.4 Cooperative Agreement Development
1.1.1.5 Personal Contact or Individual/Staff Outreach

1.1.2 Intake Activities

1.1.2.1 Initial Applicant/SESA Information Exchange
1.1.2.2 Minority Applicant/SESA Apprenticeship Information Exchange
1.1.2.3 Referral to Non-SESA
1.1.2.4 JIS Provision
1.1.2.5 Scheduling for Interview

1.1.3 Diagnostic Assessment Activities

1.1.3.1 Applicant/SESA Information Exchange
1.1.3.2 Job Bank/File Input (Manual)
1.1.3.3 Job Bank/File Input (Automated)
1.1.3.4 Testing - Aptitude
1.1.3.5 Testing - Interest
1.1.3.6 Testing - Achievement
1.1.3.7 Referral to Non-SESA
1.1.3.8 Client/SESA Service Plan Development
1.1.3.9 Service Scheduling

1.1.4 Employability Development Resource Mobilization Activities

1.1.4.1 Supportive Services Resource Development
1.1.4.2 Training Opportunity Development

1.1.5 Employability Development Activities

1.1.5.1 Vocational Problem Counseling
1.1.5.2 Occupational Choice Counseling
1.1.5.3 Group Counseling
1.1.5.4 Orientation

1.1.5.5 Caseload Conference - Staff/Client
1.1.5.6 Caseload Conference - Staff Only
1.1.5.7 Arrangement for Apprenticeship
1.1.5.8 Arrangement for Supportive Services
1.1.5.9 Arrangement for Training
1.1.5.a Assist Minority Applicants to Enter Apprenticeship Programs
1.1.5.b Follow-Up

1.2 Employer Process Activities

1.2.1 Employer Outreach Activities

1.2.1.1 Advertising
1.2.1.2 Promotion - Non-Staff
1.2.1.3 Promotion - Staff Contact
1.2.1.4 Cooperative Arrangement Development

1.2.2 Voluntary Order Solicitation Activities

1.2.2.1 Employer On-Site Visits
1.2.2.2 Phone Solicitation
1.2.2.3 Mail Solicitation

1.2.3 Mandatory Listing Activities

1.2.3.1 Mandatory Listing Compliance Investigation
1.2.3.2 Receipt and Review of Employer Lists
1.2.3.3 Receipt and Analysis of Employer Reports
1.2.3.4 Employer On-Site Solicitation/Enforcement
1.2.3.5 Phone Solicitation/Enforcement
1.2.3.6 Mail Solicitation/Enforcement

1.2.4 Job Creation Activities

1.2.4.1 Employer Contact
1.2.4.2 Job Restructuring
1.2.4.3 Job Requirement Modification
1.2.4.4 Altering Job Benefits and Conditions
1.2.4.5 Subsidized Job Development
1.2.4.6 Financial Incentive Job Development

1.2.5 Farm Labor Employer Activities

1.2.5.1 Initial SESA/Farm Labor Contractor (FLC) Information Exchange
1.2.5.2 Issue Form to Fill for Registration
1.2.5.3 Transmit Registration Form to Employment Standards Administration (ESA)
1.2.5.4 Write FLC Job Order

1.2.6 Available Job Identification Activities

1.2.6.1 Review of Classified Ads, Trade Journals, CBC Announcements, etc.
1.2.6.2 Agency Association, etc., Contact

1.2.7 Client Specific Job Order Solicitation Activities

1.2.7.1 Employer On-Site Visits
1.2.7.2 Phone Solicitation

1.2.8 Order Taking Activities

1.2.8.1 Central Order Taking
1.2.8.2 Solicitation Order Taking
1.2.8.3 Job Bank Input - Manual
1.2.8.4 Job Bank Input - Automated

1.2.9 Employer Technical Assistance Activities

1.2.9.1 Work Force Selection Assistance
1.2.9.2 Work Force Development Assistance
1.2.9.3 Work Force Utilization Assistance
1.2.9.4 Work Force Stabilization Assistance
1.2.9.5 Hiring Policy Assistance
1.2.9.6 Job Specification Assistance
1.2.9.7 Functional Job Analysis Assistance
1.2.9.8 Identifying Training And Testing Needs
1.2.9.9 EEO Compliance Information Provision
1.2.9.a Affirmative Action Plan Development

1.3 Job Matching Process Activities

1.3.1 Job Matching Activities

1.3.1.1 Client File Search
1.3.1.2 Job File Search
1.3.1.3 Match Selection
1.3.1.4 Client Call-In
1.3.1.5 Selection Interview
1.3.1.6 Clearance for Job Referral
1.3.1.7 Job Interview Scheduling
1.3.1.8 Referral to Job Opening
1.3.1.9 Client Job Interview Support Visit

1.3.2 Verification/Follow-Up Activities

1.3.2.1 Job Placement Verification/Follow-Up
1.3.2.2 Employer/Applicant Support

2.0 NON-CLIENT SPECIFIC LABOR MARKET EXCHANGE FUNCTIONS

2.1 Information Development Process Activities

2.1.1 Labor Market Information (LMI) Activity

2.1.1.1 Develop and Disseminate LMI for Applicants/ Public
2.1.1.2 Develop and Disseminate LMI for Employers/ Industry
2.1.1.3 Develop and Disseminate LMI for Other Agencies
2.1.1.4 Provide on Request Special LMI

2.1.2 Farm Labor Wage Survey Activities

2.1.2.1 Conduct Agricultural Wage Survey by Crop
2.1.2.2 Convey Wage Levels to Applicants
2.1.2.3 Publish Finding as Wage Standard by Crop

3.0 NON-LABOR MARKET EXCHANGE ACTIVITIES

3.1 Protection Process Activities

3.1.1 Employee (Applicant) Protection Activities

3.1.1.1 Publish SESA Employee Protection Services
3.1.1.2 Accept Employee Complaints
3.1.1.3 Resolve SESA Service Complaints
3.1.1.4 Refer Employee Complaints to Appropriate Agency
3.1.1.5 Follow-Up Resolution of Complaints

3.1.2 Farm Labor (Applicant) Protection Activities

3.1.2.1 Review Job Orders for Wage Level, Working Conditions, Housing Standards Compliance
3.1.2.2 Verify Compliance with Random On-Site Visits

3.1.3 Employer Complaint Activities

3.1.3.1 Accept Employer Complaints Regarding SESA Services
3.1.3.2 Review Employer Complaints

3.2 Other Legislatively Mandated Process Activities

3.2.1 Foreign Trade Act Activities (Applicant)

3.2.1.1 Collect Data on ILAB on Firms/Unions Adversely Affected by Trade Act
3.2.1.2 Determine Applicant Eligibility for Job Search/ Relocation Allowances
3.2.1.3 Screen Applicants
3.2.1.4 Refer Applicants to UI

3.2.2 Immigration/Alien Certification Activities (Agency)

3.2.2.1 Receive Requests for Information Requested on Occupations Sought to be Filled by Immigrants
3.2.2.2 Conduct Survey of Domestic Worker Availability
3.2.2.3 Determine Potential Domestic Worker Adverse Effect
3.2.2.4 Certify Alien Application

3.2.3 Learner Certification Activity (Agency)

3.2.3.1 Collect Data for ESA on Experienced Worker Availability by Occupation and Industry
3.2.3.2 Determine "Learner" Availability
3.2.3.3 Supply Certification Information

3.2.4 Defense Manpower Policy Issuance #4 Activities (Agency)

3.2.4.1 Identify High Unemployment Areas Under DMP #4
3.2.4.2 Publish List of DMP #4 Eligibility Areas
3.2.4.3 Initial ES/DMP #4 Employer Contact (Mail)
3.2.4.4 Initial ES/DMP #4 Employer Contact (Personal)
3.2.4.5 Review Preference Application
3.2.4.6 Issue Preference Certification
3.2.4.7 Review DMP #4 Employer "Hire" Reports
3.2.4.8 Notify Defense Contract Agency and Non-Compliance

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(511) Intake

Includes all time:

- spent outside local offices, including initial contact and follow-up, to reach and bring into local offices individuals who do not come on their own initiative but who require assistance to become employable;

- spent receiving individuals who come into local offices, making preliminary judgements as to the services needed, and arranging for and scheduling services within the offices;

- spent in initial or subsequent interviewing of registered, partially registered and non-registered persons to determine their needs for employment services, including completing new or updating former applications and related forms, and referring applicants to appropriate organizational units and/or other agencies for necessary services, (does not include selection interviewing related to employment which is part of the definition of Code 531, Employment);

- spent on miscellaneous activities related to Intake, such as answering telephone calls, referring to other agencies persons who are not seeking employment services, giving out brochures, and other printed materials, and performing other work that involves incidental contacts with the public.

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(5111) Outreach Activities

Includes all time spent outside local offices, including initial contact and follow-up, to reach and bring into local offices individuals who do not come on their own initiative but who require assistance to become employable.

(5112) Reception Activities

Includes all time spent receiving individuals who come into local offices, making preliminary judgements as to the services needed, and arranging for and scheduling services within the offices.

(5113) Interviewing

Includes all time spent in initial or subsequent interviewing of registered, partially registered and non-registered persons to determine their needs for employment services, including completing new or updating former applications and related forms, and referring applicants to appropriate organizational units and/or other agencies for necessary services, (does not include selection interviewing related to employment which is Code 5312, Selection Interviewing).

(5114) Miscellaneous Intake Activities

Includes all time spent on miscellaneous activities related to Intake, such as answering telephone calls, referring to other agencies persons who are not seeking employment services, giving out brochures, and other printed materials, and performing other work that involves incidental contacts with the public.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(312) Counseling

Includes all time spent in counseling individuals or groups, and such related activities as recording interviews, reviewing and analyzing information on counseling cases, interpreting test results, arranging for and referring to supportive services, which includes coaching, that are necessary to assure implementation of the employability development plan and follow-up activities to determine the progress made by counselees in achieving their planned objectives.

(313) Testing

Includes all time spent in scheduling, administering, monitoring, and scoring tests or work sample exercises, preparing reports of test results or unit activity, and maintaining related files. Also includes time spent advising ES staff as well as employers on tests, testing techniques and related matters.

(314) Other

Includes all time spent on other assessment-related activities, such as case conference meeting time (with or without the client being present) and in developing employability plans (except counseling per se between the counselor and the client); and Orientation, which is designed generally to provide understanding of those attributes, other than job skills, required to get and hold a job and is normally conducted with groups and covers such matters as personal appearance and health, preparation of job application and related forms, job hunting techniques, wages and taxes, and similar matters of employment related concern. Also includes time spent in group interviewing for the purpose of helping job ready applicants and such special groups as candidates for the summer youth program, to relate their skills to the job market.

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(5121) General Counseling Activities

Includes all time spent in counseling individuals or groups, and such related activities as recording interviews, reviewing and analyzing information on counseling cases, arranging for and referring to supportive services, which includes coaching, that are necessary to assure implementation of the employability development plan and follow-up activities to determine the progress made by counselees in achieving their planned objectives.

(5122) Interpreting Test Results

Includes all time spent in interpreting test results.

(5131) Testing

Includes all time spent in scheduling, administering, monitoring, and scoring tests or work sample exercises, preparing reports of test results or unit activity, and maintaining related files. Also includes time spent advising ES staff as well as employers on tests, testing techniques and related matters.

(5141) Case Conference Meetings

Includes all time spent on case conference meetings (with or without the client being present).

(5142) Develop Employability Plans

Includes all time spent in developing employability plans (except counseling per se between the counselor and the).

(5143) Group Orientation

Includes all time spent in orientation which is designed generally to provide understanding of those attributes, other than job skills, required to get and hold a job and is normally conducted with groups.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)	PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)
(514) Other (Continued)	(5143) Group Orientation (Continued)
	Also covers such matters as personal appearance and health, preparation of job application and related forms, job hunting techniques, wages and taxes, and similar matters of employment related concern. Also includes time spent in group interviewing for the purpose of helping job ready applicants and such special groups as candidates for the summer youth program, to relate their skills to the job market.
(520) Training Selection, Referral and Follow-Up	(5201) Training Selection, Referral and Follow-Up
Includes all time spent (except on assessment) in relating applicant needs, characteristics, and circumstances, in the selection and referral to a specific training opportunity. Also includes time devoted to development of satisfactory relationships with training facilities and follow-up actions including coaching to assure satisfactory trainee adjustment or progress in training.	Includes all time spent (except on assessment) in relating applicant needs, characteristics, and circumstances, in the selection and referral to a specific training opportunity.
	(5202) Training Development Activities
	Includes all time spent to development of satisfactory relationships with training facilities and follow-up actions including coaching to assure satisfactory trainee adjustment or progress in training.
(530) Employment Job Development (Includes Codes 531 through 534)	
(531) Employment	(5311) Job Order Taking
Includes all time spent assisting individuals to obtain employment or assisting employers to obtain workers such as: order taking, recruitment, clearance, file search, selection interviewing, call-in, referral, verification, file maintenance, individual job development, plan visits to acquaint staff with job requirements and follow-up actions including coaching to determine or assure suitable worker adjustment to a job. Includes also time devoted to preparing input for computerized Job Banks and Job Matching Systems.	Includes all time spent in order taking.
	(5312) Selection Interviewing
	Includes all time spent assisting individuals to obtain employment such as recruitment, clearance, file search, selection interviewing, call-in, referral, verification, file maintenance, individual job development, plan visits to acquaint staff with job requirements and follow-up actions including coaching to determine or assure suitable worker adjustment to a job.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(531) Employment (Continued)

(532) Job Development, Placement and Follow-Up - WIN-OJT

Includes all time spent for creation of jobs for WIN participants by means of: review of computerized Job Bank and Job Matching Systems and all other sources of information on existing vacancies; contacting area profitmaking employers for possible vacancies, or new positions in their establishments, either as direct hirees or for OJT openings; familiarizing employers with the tax credit provisions of the Revenue Act of 1971 for WIN participants.

Also, includes time devoted to referring participants to specific jobs and follow-up actions including coaching to assure satisfactory adjustment or progress in job.

(533) Job Development, Placement and Follow-Up - WIN-PSE

Includes all time spent for creation of jobs for WIN participants by means of: review of computerized Job Bank and Job Matching Systems and all other sources of information on existing vacancies; contacting public or non-profit organizations for development of public service employment opportunities; contact other federally-funded programs for possible existing or potential vacancies.

Also includes time devoted to referring participants to specific job and follow-up actions including coaching to assure satisfactory adjustment or progress in job. With respect to the PSE Program, this will include time devoted to the semi-annual review of each PSE employee.

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(5313) Job Bank

Includes time devoted to preparing input for computerized Job Banks and Job Matching Systems.

(5321) Job Development, Placement, and Follow-Up - WIN-OJT

Includes all time spent for creation of jobs for WIN participants by means of: review of computerized Job Bank and Job Matching Systems and all other sources of information on existing vacancies; contacting area profitmaking employers for possible vacancies or new positions in their establishments, either as direct hirees or for OJT openings; familiarizing employers with the tax credit provisions of the Revenue Act of 1971 for WIN participants.

Also includes time devoted to referring participants to specific jobs and follow-up actions including coaching to assure satisfactory adjustment or progress in job.

(5331) Job Development, Placement and Follow-Up - WIN-PSE

Includes all time spent for creation of jobs for WIN participants by means of: review of computerized Job Bank and Job Matching Systems and all other sources of information on existing vacancies; contacting public or non-profit organizations for development of public service employment opportunities; contact other federally-funded programs for possible existing or potential vacancies.

Also includes time devoted to referring participants to specific job and follow-up actions including coaching to assure satisfactory adjustment or progress in job. With respect to the PSE Program, this will include time devoted to the semi-annual review of each PSE employee.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)	PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)
(334) Periodic Exposure to the Job Market Includes all time spent by ES staff at the State and local levels in calling in on a regular basis those WIN participants, who have been appraised but who are not being served in any other WIN component, and exposing them to labor market information in an attempt to match their skills with job opening.	(3341) Periodic Exposure to the Job Market Includes all time spent by ES staff at the State and local levels in calling in on a regular basis those WIN participants, who have been appraised but who are not being served in any other WIN component, and exposing them to labor market information in an attempt to match their skills with job opening.
(350) Employer and Community Services (Includes Codes 351 through 334)	
(351) Employer and Union Services Includes time spent in developing and maintaining contacts with employers, including employer and union organizations. This includes personal, telephone, or mail contacts of a general promotional nature to develop job opportunities for all applicant groups or to promote acceptance of or participation in special manpower programs.	(3311) Employer and Union Services Includes time spent in developing and maintaining contacts with employers, including employer and union organizations. This includes personal, telephone, or mail contacts of a general promotional nature to develop job opportunities for all applicant groups or to promote acceptance of or participation in special manpower programs.
(352) Employer Technical Services Includes all time spent in providing advice or assistance to the employer, community and other government agencies in the identification, alleviation, or resolution of manpower problems in the area of work force selection, development, utilization, and stabilization. Also included are the use of tools and techniques for providing assistance on hiring policies; development of job specifications and related materials; conducting job analyses, job restructuring and upgrading studies; identifying training and testing needs; providing labor market information; interpreting manpower technical services.	(3321) Employer Technical Services Includes all time spent in providing advice or assistance to the employer, community and other government agencies in the identification, alleviation, or resolution of manpower problems in the area of work force selection, development, utilization, and stabilization. Also included are the use of tools and techniques for providing assistance on hiring policies; development of job specifications and related materials; conducting job analyses, job restructuring and upgrading studies; identifying training and testing needs; providing labor market information; interpreting manpower technical services.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(553) Immigration Activities

Includes time devoted to immigration activities.

(554) Community Services

Includes all time spent on the following activities:

- Stimulating community actions toward solving manpower problems which hinder maximum development and use of human resources.
- Assisting in industrial and economic development of communities.
- Establishing a continuing and developmental working relationship with community action groups, Job Corps, educational institutions, vocational rehabilitation, and other community agencies or groups.
- Training other governmental, social, and community agency personnel in the programs and operations of the State manpower agency.
- Presenting information or proposing manpower actions to employer, union, educational, governmental bodies, or other groups; including time devoted to developing Manpower training proposals.
- Participating in local civic functions, organizations, and clubs to promote the policies and objectives of the Employment Service within the community.
- Dissemination of labor and economic information by radio, television, mail, or in person to individuals or groups within a community on matters regarding the ES.

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(5531) Immigration Activities

Includes time devoted to immigration activities.

(5541) Community Services

Includes all time spent on the following activities:

- Stimulating community actions toward solving manpower problems which hinder maximum development and use of human resources.
- Assisting in industrial and economic development of communities.
- Establishing a continuing and developmental working relationship with community action groups, Job Corps, educational institutions, vocational rehabilitation, and other community agencies or groups.
- Training other governmental, social and community agency personnel in the programs and operations of the State manpower agency.
- Presenting information or proposing manpower actions to employer, union, educational, governmental bodies, or other groups; including time devoted to developing Manpower training proposals.
- Participating in local civic functions, organizations, and clubs to promote the policies and objectives of the Employment Service within the community.
- Dissemination of labor and economic information by radio, television, mail, or in person to individuals or groups within a community on matters regarding the ES.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)	PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)
(560) **Manpower Information** (Includes Codes 561 through 565)	
(561) **Labor Area Information** Includes all time spent on: - Gathering, analyzing, interpreting, and disseminating information regarding local labor area conditions, overall employment and unemployment in the State, economic regions, counties, districts, and parts of labor areas, and for applicant groups such as poor, disadvantaged, etc. - Preparing labor area newsletters and reports, and information related to eligibility for assistance of areas under various Federal programs.	(5611) **Gathering and Dissemination of Information** Gathering, analyzing, interpreting, and disseminating information regarding local labor area conditions, overall employment and unemployment in the State, economic regions, counties, districts, and parts of labor areas, and for applicant groups such as poor, disadvantaged, etc. (5612) **Preparing Newsletters on Federal Programs** Preparing labor area newsletters and reports, and information related to eligibility for assistance of areas under various Federal programs.
(562) **Occupational Opportunities Information** Includes time spent on the following activities: - Preparing, analyzing, interpreting, and disseminating economic information on current and projected occupational shortages by State or area. - Developing information to identify current or anticipated employment opportunities by occupation and area occupational guides. - Preparing job vacancy surveys, area skill and other manpower projection surveys, industry surveys, and area wage surveys. - Making training needs surveys and providing job search information for applicants.	(5621) **Occupational Opportunities Information** Includes time spent on the following activities: - Preparing, analyzing, interpreting, and disseminating economic information on current and projected occupational shortages by State or area. - Developing information to identify current or anticipated employment opportunities by occupation and area occupational guides. - Preparing job vacancy surveys, area skill and other manpower projection surveys, industry surveys, and area wage surveys. - Making training needs surveys and providing job search information for applicants.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)	PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)
(563) Operations Research	(5631) Operations Research
Includes time spent in the following activities: - Special research or similar experimental projects for the development of new concepts and tools to make operations more responsive to existing or changing needs, for measuring the effectiveness, costs, and benefits of various services, and for the development of new or improved techniques and procedures for compiling labor area or occupational job opportunities information. - Developing and testing new approaches or procedures for obtaining manpower information for management purposes, local office participation in cost-benefit analysis, and other special studies for later adaptation to a continuous ongoing program.	Includes time spent in the following activities: - Special research or similar experimental projects for the development of new concepts and tools to make operations more responsive to existing or changing needs, for measuring the effectiveness, costs, and benefits of various services, and for the development of new or improved techniques and procedures for compiling labor area or occupational job opportunities information. - Developing and testing new approaches or procedures for obtaining manpower information for management purposes, local office participation in cost-benefit analysis, and other special studies for later adaptation to a continuous ongoing program.
(564) Occupational Analysis Field Centers	(5641) Occupational Analysis Field Centers
Includes all time spent by formally organized field centers in the collection, analysis, preparation, and dissemination of occupational information of nationwide application. Also included are research and development projects for improving the effectiveness of occupational analysis tools.	Includes all time spent by formally organized field centers in the collection, analysis, preparation, and dissemination of occupational information of nationwide application. Also included are research and development projects for improving the effectiveness of occupational analysis tools.
(565) Test Development	(5651) Test Development
Includes all time spent in preparing research plans, collecting and analyzing research data, and validating and preparing technical reports on research results to develop tests.	Includes all time spent in preparing research plans, collecting and analyzing research data, and validating and preparing technical reports on research results to develop tests.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(610) Management and Supervision (Local)

All time which can be related directly to the administration and supervision of the State manpower program should be reported under this code. Time reported under this code primarily involves but is not necessarily limited to the performance of the following functions:

- Time of the local office supervisor and his assistants, and all line personnel engaged in managing and supervising employment, training, and related manpower operations at the local level. Time spent in direct supervision of operating functions should be charged to the function being supervised, i.e., a working supervisor of a placement unit should charge to activity Code 531, Employment.
- Planning, directing and controlling local office operations.
- Developing, implementing and monitoring plans of service.
- Preparing budget justifications and supporting material.
- Attending outside professional and technical conferences as well as in-office staff meetings and conferences dealing with overall operating problems, policies, procedures, personnel problems, etc. (Time spent at meetings and conferences, within or outside the agency, related to a specific functional area should be charged to the appropriate functional activity code.)
- Preparing and verifying data for local office activity reports and other narrative and statistical operating reports.
- Office services (switchboard operation, mail service, etc.).

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(6101) Management and Supervision (Local)

All time which can be related directly to the administration and supervision of the State manpower program should be reported under this code. Time reported under this code primarily involves but is not necessarily limited to the performance of the following functions:

- Time of the local office supervisor and his assistants, and all line personnel engaged in managing and supervising employment, training, and related manpower operations at the local level. Time spent in direct supervision of operating functions should be charged to the function being supervised, i.e., a working supervisor of a placement unit should charge to the appropriate employment activity code.
- Planning, directing and controlling local office operations.
- Developing, implementing and monitoring plans of service.
- Preparing budget justifications and supporting material.
- Attending outside professional and technical conferences as well as in-office staff meetings and conferences dealing with overall operating problems, policies, procedures, personnel problems, etc. (Time spent at meetings and conferences, within or outside the agency, related to a specific functional area should be charged to the appropriate functional activity code.)
- Preparing and verifying data for local office activity reports and other narrative and statistical operating reports.
- Office services (switchboard operation, mail service, etc.).

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(611) Management and Supervision (Central)

All time which can be related directly to the administration and supervision of the State manpower program should be reported under this code. Time requested under this code primarily involves but is not necessarily limited to the performance of the following functions:

- Time of the Employment Service Director and his assistants, and all line personnel in the central or district offices engaged in managing and supervising employment, training, and related manpower operations. Time spent in direct supervision of operating functions should be charged to the function being supervised, i.e., a working supervisor of a central Job Bank placement unit should charge to activity Code 531, Employment.
- Planning, directing and controlling State and local office operations.
- Developing, implementing, and monitoring plans of service.
- Attending outside professional and technical conferences as well as in-office staff meetings and conferences dealing with overall operating problems, policies, procedures, personnel problems, etc. (Time spent at meetings and conferences, within or outside the agency, related to a specific functional area should be charged to the appropriate functional activity code.)
- Preparing and verifying data for local office activity reports and other narrative and statistical operating reports.
- Office services (switchboard operation, mail service, etc.).

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(6111) Management and Supervision (Central)

All time which can be related directly to the administration and supervision of the State manpower program should be reported under this code. Time requested under this code primarily involves but is not necessarily limited to the performance of the following functions:

- Time of the Employment Service Director and his assistants, and all line personnel in the central or district offices engaged in managing and supervising employment, training, and related manpower operations. Time spent in direct supervision of operating functions should be charged to the function being supervised, i.e., a working supervisor of a central Job Bank placement unit should charge to activity 5313 Job Bank.
- Planning, directing and controlling State and local office operations.
- Developing, implementing, and monitoring plans of service.
- Attending outside professional and technical conferences as well as in-office staff meetings and conferences dealing with overall operating problems, policies, procedures, personnel problems, etc. (Time spent at meetings and conferences, within or outside the agency, related to a specific functional area should be charged to the appropriate functional activity code.)
- Preparing and verifying data for local office activity reports and other narrative and statistical operating reports.
- Office services (switchboard operation, mail service, etc.).

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(620) Staff Technical Service (Local)

Includes all time of management and program staff (such as management analysts; placement technicians; youth, older workers, and minority group specialists, etc.) in developing and organizing materials, performing functional supervision, monitoring contracts, conducting evaluations, attending conferences or providing technical assistance to local or central office Employment Service staff or the public in matters affectin- their particular area of work.

Includes time spent on the following activities:

- Publicizing and/or explaining requirements of the Farm Labor Contract or Registration Act (FLCRA) at the State level.
- Receiving and transmitting applications for registration under the Act.
- Receiving and transmitting complaints made against registered farm labor contractors.

(621) Staff Technical Service (Central)

Includes all time of management and program staff at the State and area level (such as management analysts; placement technicians; youth, older worker, and minority group specialists, etc.) in developing and organizing materials, performing functional supervision, monitoring contracts, conducting evaluations; attending conferences or providing technical assistance to local or central office Employment Service staff or the public in matters affecting their particular area of work.

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(6201) Staff Technical Service-Farm (Local)

Includes time spent on the following activities:

- Publicizing and/or explaining requirements of the Farm Labor Contractor Registration Act (FLCRA) at the State level.
- Receiving and transmitting applications for registration under the Act.
- Receiving and transmitting complaints made against registered farm labor contractors.

(6202) Staff Technical Services-Other (Local)

Includes all time of management and program staff (such as management analysts; placement technicians; youth, older workers, and minority group specialists, etc.) in developing and organizing materials, performing functional supervision, monitoring contracts, conducting evaluations, attending conferences or providing technical assistance to local or central office Employment Service staff or the public in matters affecting their particular area of work.

(6211) Staff Technical Service - Farm (Central)

Includes time spent on the following activities:

- Publicizing and/or explaining requirements of the Farm Labor Contractor Registration Act (FLCRA) at the State level.
- Receiving and transmitting applications for registration under the Act.
- Receiving and transmitting complaints made against registered farm labor contractors.

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) ALTERNATIVE III)	PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)
(621) Staff Technical Service (Central) (continued) Includes time spent on the following activities: - Publicizing and/or explaining requirements of the Farm Labor Contractor Registration Act (FLCRA) at the State level. - Receiving and transmitting applications for registration under the Act. - Receiving and transmitting complaints made against registered farm labor contractors.	(6212) Staff Technical Service - Other (Central) Includes all time of management and program staff at the State and area level (such as management analysts; placement technicians; youth, older worker, and minority group specialists, etc.) in developing and organizing materials, performing functional supervision monitoring contracts, conducting evaluations; attending conferences or providing technical assistance to local or central office Employment Service staff or the public in matters affecting their particular area of work.
(630) Career Development and Training (Local) Includes all time spent away from regular job assignments for out-service and in-service staff training for career development. Includes the time of the training as well as the trainee for both central office and local office Employment Service employees. Exceptions: - Time spent for training on-the-job in the actual work situation should be charged to the appropriate activity code in which the work and training are being performed. - Time of the trainer conducting training outside the agency to other governmental, social and community agency personnel should be charged to Code 554, Community Services. Where such trainees are included as part of the regular schedule of training given to State ES employees, the time of the trainer is charged to this Code (630, Career Development and Training).	(6301) Career Development and Training (Local) Includes all time spent away from regular job assignments for out-service and in-service staff training for career development. Includes the time of the training as well as the trainee for both central office and local office Employment Service employees. Exceptions: - Time spent for training on-the-job in the actual work situation should be charged to the appropriate activity code in which the work and training are being performed. - Time of the trainer conducting training outside the agency to other governmental, social and community agency personnel should be charged to Code 5541, Community Services. Where such trainees are included as part of the regular schedule of training given to State ES employees, the time of the trainer is charged to this Code (6301, Career Development and Training).

APPENDIX B. RELATIONSHIP OF EXISTING TIME DISTRIBUTION DETAIL BAND AND PROPOSED SUBDETAIL BAND CODES

(ALTERNATIVE III AND ALTERNATIVE IV)

EXISTING TIME DISTRIBUTION CODES (DETAIL BAND) (ALTERNATIVE III)

(631) Career Development and Training (Central)

Includes all time spent away from regular job assignments for out-service and in-service staff training for career development or on temporary detail outside the agency. Includes the time of the trainer as well as the trainee for both central office and local office Employment Service employees.

Exceptions:

- Time spent for training on-the-job in the actual work situation should be charged to the appropriate activity code in which the work and training are being performed.

- Time of the trainer conducting training outside the agency to other governmental, social, and community agency personnel should be charged to Code 554, Community Services. Where such trainees are included as part of the regular schedule of training given to the State ES employees, the time of the trainer is charged to this Code (631, Career Development and Training).

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(6311) Career Development and Training (Central)

Includes all time spent away from regular job assignments for out-service and in-service staff training for career development or on temporary detail outside the agency. Includes the time of the trainer as well as the trainee for both central office and local office Employment Service employees.

Exceptions:

- Time spent for training on-the-job in the actual work situation should be charged to the appropriate activity code in which the work and training are being performed.

- Time of the trainer conducting training outside the agency to other governmental, social, and community agency personnel should be charged to Code 5541, Community Services. Where such trainees are included as part of the regular schedule of training given to the State ES employees, the time of the trainer is charged to this Code (6311, Career Development and Training).

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITIES (ALTERNATIVE VI)
(5111) Outreach Activities - spent outside local offices, including initial contact and followup, to reach and bring into local offices individuals who do not come on their own initiative but who require assistance to become employable;	. Promotion, e.g., job fairs . Advertising . Personal Contact or Individual/Staff Outreach
(5112) Reception Activities - spent receiving individuals who come into local offices, making preliminary judgements as to the services needed, and arranging for and scheduling services within the offices;	. Initial Applicant/SESA Information Exchange. . Minority Applicant/SESA Apprenticeship Information Exchange . JTS Provision o Scheduling for Interview
(5113) Interviewing - spent in initial or subsequent interviewing of registered, partially registered and non-registered persons to determine their needs for employment services, including completing new or updating former applications and related forms, and referring applicants to appropriate organizational units and/or other agencies for necessary services, (does not include selection interviewing related to employment which is Code 5312, Selection Interviewing);	. Applicant/SESA Information Exchange . Referral to Non-SESA
(5114) Miscellaneous Intake Activities - spent on miscellaneous activities related to intake, such as answering telephone calls, referring to other agencies persons who are not seeking employment services, giving out brochures, and other printed materials, and performing other work that involves incidental contacts with the public.	. Mandatory Referral Arrangement, e.g., UI, Welfare Food Stamps . Cooperation Agreement Development (Voluntary Referral, e.g., Vocational Rehabilitation, Community Groups) . Referral to Non-SESA

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(5121) General Counseling Activities	
Includes all time spent in counseling individuals or groups, and such related activities as recording interviews, reviewing and analyzing information on counseling cases, arranging for and referring to supportive services, which includes coaching, that are necessary to assure implementation of the employability development plan and followup activities to determine the progress made by counselees in achieving their planned objectives.	. Service Scheduling . Vocational Problem Counseling . Occupational Choice Counseling
(5122) Interpreting Test Results	
Includes all time spent in interpreting test results.	
(5131) Testing	
Includes all time spent in scheduling, administering, monitoring and scoring tests or work sample exercises, preparing reports of test results or unit activity, and maintaining related files. Also includes time spent advising ES staff as well as employers on tests, testing techniques and related matters.	. Testing . Aptitude . Interest . Achievements
(5141) Case Conference Meetings	
Includes all time spent on case conference meetings (with or without the client being present).	. Caseload Conference - Client/Staff . Caseload Conference - Staff Only
(5142) Develop Employability Plans	
Includes all time spent in developing employability plans (except counseling per se, between the counselor and the client).	. Client/SESA Service Plan Development

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(5143) Group Orientation Includes all time spent in orientation which is designed generally to provide understanding of those attributes, other than job skills, required to get and hold a job and is normally conducted with groups and covers such matters as personal appearance and health, preparation of job application and related forms, job hunting techniques, wages and taxes, and similar matters of employment related concern. Also includes time spent in group interviewing for the purpose of helping job ready applicants and such special groups as candiates for the summer youth program, to relate their skills to the job market.	
(5211) Training Selection, Referral and Followup Includes all time spent (except on assessment) in relating applicant needs, characteristics, and circumstances, in the selection and referral to a specific training opportunity.	. Arrangement for Apprenticeship . Arrangement for Supportive Services . Arrangement for Training . Assist Minority Applicants to Enter Apprenticeship Programs
(5212) Training Development Activities Includes time devoted to development of satisfactory relationships with training facilities and followup actions including coaching to assure satisfactory trainee adjustment or progress in training.	. Supportive Services Development . Training Opportunity Development
(5311) Job Order Taking Includes all time spent in order taking.	. Central Order Taking . Solicitation Order Taking

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(5312) Selection Interviewing	
Includes all time spent assisting individuals to obtain employment such as recruitment, clearance, file search, selection interviewing, call in, referral, verification, file maintenance, individual job development, plan visits to acquaint staff with job requirements and followup actions including coaching to determine or assure suitable worker adjustment to a job.	. Client File Search . Job File Search . Match Selection . Client Call-In . Selection Interview . Clearance for Job Referral . Job Interview Scheduling . Referral to Job Opening . Client Job Interview Support Visit . Job Placement Verification/Followup . Employer/Applicant Support . Employer On-Site Visits . Phone Solicitation
(5313) Job Bank	
Includes time devoted to preparing input for computerized Job Banks and Job Matching Systems.	. Job Bank Input - Manual - Automated
(5321) Job Development, Placement, and Followup - WIN-OJT	
Includes all time spent for creation of jobs for WIN participants by means of: review of computerized Job Bank and Job Matching Systems and all other sources of information on existing vacancies or new positions in their establishments, either as direct hirees or for OJT openings; familiarizing employers with the tax credit provisions of the Revenue Act of 1971 for WIN participants.	

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(5331) Job Development, Placement and Followup-WIN PSE Includes all time spent for creation of jobs for WIN participants by means of: review of computerized Job Bank and Job Matching Systems and all other sources of information on existing vacancies; contacting public or nonprofit organizations for development of public service employment opportunities; contact other federally-funded programs for possible existing or potential vacancies. Also, includes time devoted to referring participants to specific job and followup actions including coaching to assure satisfactory adjustment or progress in job. With respect to the PSE program, this will include time devoted to the semi-annual review of each PSE employee.	
(5341) Periodic Exposure to the Job Market Includes all time spent by ES staff at the State and local levels in calling in on a regular basis those WIN participants, who have been appraised but who are not being served in any other WIN component, and exposing them to labor market information in an attempt to match their skills with job opening.	
(5501) Employer and Community Services. Includes Codes 5511 through 5541	
(5511) Employer and Union Services Includes time spent in developing and maintaining contacts with employers, including employer and union organizations. This includes personal, telephone, or mail contacts of a general promotional nature to develop job opportunities for all applicant groups or to promote acceptance of or participation in special manpower programs.	. Advertising . Promotion - Non Staff, e.g., Mass Mailing . Promotion - Staff Contact, e.g., Chamber of Commerce Associations . Cooperative Arrangement Development, e.g., CETA . Employer On-Site Visits . Phone Solicitation . Mail Solicitation

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(5501) Employer and Community Services. Includes Codes 5511 through 5541	
(5511) Employer and Union Services (continued)	. Mandatory Listing Compliance Investigation . Receipt and Review of Employer Lists . Receipt and Analysis of Employer Reports . Employer On-Site Solicitation/Enforcement . Phone Solicitation/Enforcement . Mail Solicitation/Enforcement . Identify High Unemployment Areas Under DMP #4 . Publish List of DMP #4 Eligibility Areas . Initial ES/DMP #4 Employer Contact - Mail Contact - Personal Contact . Review Preference Application . Issue Preference Certificate . Review DMP #4 Employer "Hire" Reports . Notify Defense Contract Agency of Non-Compliance
(5521) Employer Technical Services Includes all time spent in providing advice or assistance to the employer, community and other government agencies in the identification, alleviation, or resolution of manpower problems in the area of work force selection, development, utilization, and stabilization. Also included are the use of tools and techniques for providing assistance on hiring policies; development of job specifications and related materials; conducting job analyses, job restructuring and upgrading studies; identifying training and testing needs; providing labor market information; interpreting manpower technical services.	. Work Force Selection Assistance . Work Force Development Assistance . Work Force Stabilization Assistance . Hiring Policy Assistance . Job Specification Assistance . Functional Job Analysis Assistance . Identifying Training and Testing Needs . EEO Compliance Information Provision . Affirmative Action Plan Development . Employer Contact . Job Restructuring . Job Requirement Modification . Altering Job Benefits and Conditions . Subsidized Job Development, e.g., OJT, PSE, WE

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

(5521) Employer Technical Services (continued)

(5531) Immigration Activities

Includes all time devoted to immigration activities.

(5541) Community Services

Includes all time spent on the following activities:

- stimulating community actions toward solving manpower problems which hinder maximum development and use of human resources;

- assisting in industrial and economic development of communities;

- establishing a continuing and developmental working relationship with community action groups, Job Corps, educational institutions, vocational rehabilitation, and other community agencies or groups;

- training other governmental, social, and community agency personnel in the programs and operations of the State manpower agency.

PROPOSED SUBACTIVITIES (ALTERNATIVE VI)

- Financial Incentive Job Development, e.g., Tax Credit
- Review of Classified Ads, Trade Journals, CBC Announcements, etc.
- Agency Association, etc., Contact

IMMIGRATION/ALIEN CERTIFICATION ACTIVITIES (AGENCY)

- Receive Requests for Information Requested on Occupations Sought to be Filled by Immigrants
- Conduct Survey of Domestic Worker Availability
- Determine Potential Domestic Worker Adverse Effect
- Certify Alien Application

APPENDIX C. RELATIONSHIP OF SUBACTIVITIES AND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBACTIVITY AND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITIES (ALTERNATIVE VI)
(5542) Community Services (continued) - presenting information or proposing manpower actions to employer, union, educational, governmental bodies, or other groups; including time devoted to developing manpower training proposals; - participating in local civic functions, organizations, and clubs to promote the policies and objectives of the Employment Service within the community; - dissemination of labor and economic information by radio, television, mail, or in person to individual or groups within a community on matters regarding the Employment Service.	
(5611) Gathering and Dissemination of Information - gathering, analyzing, interpreting, and disseminating information regarding local labor area conditions, overall employment and unemployment in the State, economic regions, counties, districts, and parts of labor areas, and for applicant groups such as poor, disadvantaged, etc.	. Develop and Disseminate Labor Market Information for: - Applicants/Public - Employers/Industry - Other Agencies . Conduct Agricultural Wage Survey by Crop . Convey Wage Levels to Applicants . Publish Finding as Wage Standard by Crop . Collect Data on ES/UI on Firms/Unions Adversely Affected by Trade Act . Determine Applicant Eligibility for Job Search/Relocation Allowances . Screen Applicants . Refer Applicants to UI . Collect Data for ES/UI on Experience Worker Availability by Occupation and Industry

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(5611) Gathering and Dissemination of Information (continued)	• Determine "Learner" Availability • Supply Certification Information to ESA
(5612) Preparing Newsletter on Federal Programs - preparing labor area newsletters and reports, and information related to eligibility for assistance of areas under various federal programs.	• Provide on Request Special Labor Market Information
(5621) Occupational Opportunities Information Includes time spent on the following activities: - preparing, analyzing, interpreting and disseminating economic information on current and projected occupational shortages by state or area; - developing information to identify current or anticipated employment opportunities by occupation and area occupational guides; - preparing job vacancy surveys, area skill and other manpower projection surveys, industry surveys, and area wage surveys; - making training needs surveys and providing job search information for applicants.	

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

PROPOSED SUBACTIVITES (ALTERNATIVE VI)

(5631) Operations Research

Includes time spent in the following activities:

- special research or similar experimental projects for the development of new concepts and tools to make operations more responsive to existing or changing needs, for measuring the effectiveness, costs, and benefits of various services and for the development of new or improved techniques and procedures for compiling labor area or occupational job opportunities information;

- developing and testing new approaches or procedures for obtaining manpower information for management purposes, local office participation in cost-benefit analysis, and other special studies for later adaptation to a continuous ongoing program.

(5641) Occupational Analysis Field Centers

Includes all time spent by formally organized field centers in the collection, analysis, preparation and dissemination of occupational information of nationwide application. Also included are research and development projects for improving the effectiveness of occupational analysis tools.

(5651) Test Development

Includes all time spent in preparing research plans, collecting and analyzing research data, and validating and preparing technical reports on research results to develop tests.

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(6101) Management and Supervision (Local) All time which can be related directly to the administration and supervision of the State manpower program should be reported under this code. Time reported under this code primarily involves but is not necessarily limited to the performance of the following functions: - time of the local office supervisor and his assistants, and all line personnel engaged in managing and supervising employment, training, and related manpower operations at the local level. Time spent in direct supervision of operating functions should be charged to the function being supervised, i.e., a working supervisor of a placement unit should charge to the appropriate employment activity code; - planning, directing, and controlling local office operations; - developing, implementing, and monitoring plans of service; - preparing budget justifications and supporting material; - attending outside professional and technical conferences as well as in-office staff meetings and conferences dealing with overall operating problems, etc. (Time spent at meetings and conferences, within or outside the agency, related to a specific functional area should be charged to the appropriate functional activity code.)	. Publish SESA Employee Protection Services . Accept Employee Complaints . Resolve SESA Service Complaints . Refer Employee Complaints to Appropriate Agency . Follow-Up Resolution of Complaints . Accept Employer Complaints Concerning SESA Services . Review Employer Complaints

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)	PROPOSED SUBACTIVITES (ALTERNATIVE VI)
(6101) Management and Supervision (Local) (continued) - preparing and verifying data for local office activity reports and other narrative and statistical operating reports; - office services (switchboard operation, mail service, etc.).	
(6201) Staff Technical Service-Farm (Local) Include time spent on the following activities: - publicizing and/or explaining requirements of the Farm Labor Contractor Registration Act (FLCRA) at the State level; - receiving and transmitting applications for registration under the Act; - receiving and transmitting complaints made against registered farm labor contractors.	• Initial SESA/Farm Labor Contractor (FLC) Information Exchange • Issue Form to FLC for Registration • Transmit Registration Form to Employment Standards Administration (ESA) • Write FLC Job Order • Review Job Orders for Wage Level, Working Conditions, Housing Standards Compliance • Verify Compliance with Random On-Site Visits
(6202) Staff Technical Service-Other (Local) Includes all time of management and program staff (such as management analysts; placement technicians; youth, older workers, and minority group specialists, etc.) in developing and organizing materials, performing functional supervision, monitoring contracts, conducting evaluations, attending conferences or providing technical assistance to local or central office Employment Service staff or the public in matters affecting their particular area of work.	

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

PROPOSED SUBACTIVITES (ALTERNATIVE VI)

(6301) Career Development and Training (Local)

Includes all time spent away from regular job assignments for out-service and in-service staff training for career development. Includes the time of the training as well as the trainee for both central office and local office Employment Service employees.

Exceptions:

- time spent for training on-the-job in the actual work situation should be charged to the appropriate activity code in which the work and training are being performed;

- time of the trainer conducting training outside the agency to other governmental, social and community agency personnel should be charged to Code 5541, Community Services. Where such trainees are included as part of the regular schedule of training given to State ES employees, the time of the trainer is charged to this Code (6301, Career Development and Training).

(6111) Management and Supervision (Central)

All time which can be related directly to the administration and supervision of the State manpower programs should be reported under this code. Time requested under this code primarily involves but is not necessarily limited to the performance of the following functions:

- time of the Employment Service Director and his assistants, and all line personnel in the central or district offices engaged in managing and supervising employment, training, and related manpower operations. Time spent in direct supervision of operating functions should be charged to the function being supervised, i.e., working supervisor of a central Job Bank placement unit should charge to activity code 5313, Job Bank.

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV)

PROPOSED SUBACTIVITES (ALTERNATIVE VI)

(6111) Management and Supervision (Central) (continued)

- planning, directing, and controlling state and local office operations;

- developing, implementing, and monitoring plans of service;

- attending outside professional and technical conferences as well as in-office staff meetings and conferences dealing with overall operating problems, policies, procedures, personnel problems, etc. (Time spent at meetings and conferences within or outside the agency, related to a specific functional area should be charged to the appropriate functional activity code.);

- preparing and verifying data for local office activity reports and other narrative and statistical operating reports;

- office services (switchboard operation, mail service, etc.).

(6211) Staff Technical Service - Farm (Central)

Include time spent on the following activities:

- publicizing and/or explaining requirements of the Farm Labor Contractor Registration Act (FLCRA) at the State level;

- receiving and transmitting applications for registration under the Act;

- receiving and transmitting complaints made against registered farm labor contractors.

APPENDIX C. RELATIONSHIP OF SUBDETAILED BAND CODES TO SUBACTIVITIES CODES

(ALTERNATIVE IV AND ALTERNATIVE VI)

PROPOSED SUBDETAIL BAND CODES (ALTERNATIVE IV) | PROPOSED SUBACTIVITES (ALTERNATIVE

(6212) Staff Technical Service - Other (Central)

Includes all time of management and program staff at the State and area level (such as management analysts; placement technicians; youth, older worker, and minority group specialists, etc.) in developing and organizing materials, performing functional supervision monitoring contracts, conducting evaluations; attending conferences or providing technical assistance to local or central office Employment Service staff or the public in matters affecting their particular area of work.

(6311) Career Development and Training (Central)

Includes all time spent away from regular job assignments for out-service and in-service staff training for career development or on temporary detail outside the agency. Includes the time of the trainer as well as the trainee for both central office and local office Employment Service employees.

Exceptions:

- time spent for training on-the-job in the actual work situation should be charged to the appropriate activity code in which the work and training are being performed;

- time of the trainer conducting training outside the agency to other governmental, social, and community agency personnel should be charged to Code 5541, Community Services. Where such trainees are included as part of the regular schedule of training given to the State ES employees, the time of the trainer is charged to this Code (6311, Career Development and Training).

APPENDIX D. CROSSWALK OF ACTIVITIES AND SUBACTIVITIES TO THE SUBDETAIL BAND CODES

(ALTERNATIVES IV, V AND VI)

PROPOSED ACTIVITIES AND SUBACTIVITIES	SUBDETAIL BAND CODES
1. APPLICANT PROCESS ACTIVITIES	
Outreach Activities	
. Promotion, e.g., job fairs	5111
. Advertising	5111
. Mandatory Referral Arrangement, e.g., UI, Welfare Food Stamps	5114
. Cooperative Agreement Development (Voluntary Referral, e.g., Vocation Rehabilitation, Community Groups)	5114
. Personal Contact or Individual/Staff Outreach	5111
Intake Activities	
. Initial Applicant/SESA Information Exchange	5112
. Minority Applicant/SESA Apprenticeship Information Exchange	5112
. Referral to Non-SESA	5113
. JIS Provision	5112
. Scheduling for Interview	5112
Diagnostic Assessment Activities	
. Applicant/SESA Information Exchange	5113
. Job Bank/File Input	5313
- Manual	
- Automated	
. Testing	5131
- Aptitude	
- Interest	
- Achievement	
. Referral to Non-SESA	5114
. Client/SESA Service Plan Development	5142
. Service Scheduling	5121

PROPOSED ACTIVITIES AND SUBACTIVITIES OUPUTS	SUBDETAIL BAND CODES
1. APPLICANT PROCESS ACTIVITY OUTPUTS	
Outreach Activity Outputs	
. Applicant/Awareness of SESA Service Availability	5111,5114
. Applicant/SESA Office Contact	5111,5114
. Applicant/SESA Scheduled Interview	5111,5114
. Cooperation Agreement	5111,5114
Intake Activity Outputs	
. Applicant Awareness of Service Need	5112
. Applicant Awareness of Apprenticeship Program	5112
. Applicant Scheduled Interview	5112
. Applicant Awareness of Job Market Openings	5112
. Non-SESA Service Provision (By Referral)	5113
Diagnostic Assessment Activity Outputs	
. Applicant Case File	5113
. Test Result	5131
. Non-SESA Service (By Referral) Provision	5114
. Labor Supply Information Records	5113
. Applicant Aptitude/Interest Profile	5131
. Applicant Awareness of Job Qualifications and Potential	5131
. Applicant Awareness of Employment Development Service Needs	5142
. Employability Development Service Plan/Schedule	5142
. Job Match Plan/Schedule	5142
. Work Test Certification for UI	5113
. Work Test Certification for Welfare	5113
. Work Test Certification for Food Stamps	5113

APPENDIX D. CROSSWALK OF ACTIVITIES AND SUBACTIVITIES TO THE SUBDETAIL BAND CODES

(ALTERNATIVES IV, V AND VI)

PROPOSED ACTIVITIES AND SUBACTIVITIES	SUBDETAIL BAND CODES
1. APPLICANT PROCESS ACTIVITIES	
Employability Development Resource Mobilization Activities	
. Supportive Services Resource Development	5212
. Training Opportunity Development	5212
Employability Development Activities	
. Vocational Problem Counseling	5121
. Occupational Choice Counseling	5121
. Group Counseling	5143
. Orientation	5143
. Caseload Conference - Client/Staff	5141
. Caseload Conference - Staff Only	5141
. Arrangement for Apprenticeship	5211
. Arrangement for Supportive Services	5211
. Arrangement for Training	5211
. Assist Minority Applicants to Enter Apprenticeship Programs	5211
. Follow-Up	5211
2. EMPLOYER PROCESS ACTIVITIES	
Employer Outreach Activities	
. Advertising	5511
. Promotion - Non-Staff, e.g., Mass Mailing	5511
. Promotion - Staff Contact, e.g., Chamber of Commerce Associations	5511
. Cooperative Arrangement Development, e.g., CETA	5511
Voluntary Order Solicitation Activities	
. Employer On-Site Visits	5511
. Phone Solicitation	5511
. Mail Solicitation	5511

PROPOSED ACTIVITIES AND SUBACTIVITIES OUPUTS	SUBDETAIL BAND CODES
1. APPLICANT PROCESS ACTIVITY OUTPUTS	
Employability Development Resource Mobility Activity Outputs	
. SESA/Supportive Service Agency Treatment	5212
. SESA/Training Agency Agreement	5212
Employability Development Activity Outputs	
. Arrangement for Supportive Service	5211
. Arrangement for Training	5211
. Referral to Supportive Service	5211
. Referral for Training	5211
. Informed Job Ready Individual	5121,5143,5141
. Job Match Plan (Occupational Goal)	5121,5143,5141
. Apprenticeship Referral	5211
. Referral to Apprenticeship Referral	5211
. Follow-Up Report	5211
EMPLOYER PROCESS	
2. EMPLOYER PROCESS ACTIVITY OUTPUTS	
Employer Outreach Service Outputs	
. Employer Awareness of SESA Service Availability	5511
. Employer Inquiry	5511
. Employer Job Order	5511
Voluntary Order Solicitation Activity Outputs	
. Employer Awareness of SESA Service Availability	5511
. Employer Inquiry	5511
. Employer Job Order	5511

APPENDIX D. CROSSWALK OF ACTIVITIES AND SUBACTIVITIES TO THE SUBDETAIL BAND CODES

(ALTERNATIVES IV, V AND VI)

PROPOSED ACTIVITIES AND SUBACTIVITIES	SUBDETAIL BAND CODES
2. EMPLOYER PROCESS ACTIVITIES	
Mandatory Listing Activities	
. Mandatory Listing Compliance Investigation	5311
. Receipt and Review of Employer Lists	5511
. Receipt and Analysis of Employer Reports	5511
. Employer On-Site Solicitation/Enforcement	5511
. Phone Solicitation/Enforcement	5511
. Mail Soliciation/Enforcement	5511
Job Creation Activities	
. Employer Contact	5521
. Job Restructuring	5521
. Job Requirement Modification	5521
. Altering Job Benefits and Conditions	5521
. Subsidized Job Development, e.g., OJT, PSE, WE	5521
. Financial Incentive Job Development, e.g., Tax Credit	5521
Farm Labor Employer Activities	
. Initial SESA/Farm Labor Contractor (FLC) Information Exchange	6201
. Issue Form to FLC for Registration	6201
. Transmit Registration Form to Employment Standards Administration (ESA)	6201
. Write FLC Job Order	6201
Available Job Identification Activities	
. Review of Classified Ads, Trade Journals, CBC Announcements, etc.	5521
. Agency Association, etc., Contact	5521

PROPOSED ACTIVITIES AND SUBACTIVITIES OUPUTS	SUBDETAIL BAND CODES
2. EMPLOYER SERVICE ACTIVITY OUTPUTS	
Mandatory Listing Activity Outputs	
. Listing Compliance (Legal Requirement Satisfaction)	5511
. Employer Awareness of SESA Service Availability	5511
. Employer Inquiry	5511
. Employer Job Order	5511
Job Creation Activity Outputs	
. Restructured Job Content	5521
. Modified Job Entrance Requirements	5521
. Altered Job Benefits and Conditions	5521
. Subsidized Job - OJT, PSE, WTRU Experience	5521
. Job With Tax Credit	5521
. Employer Awareness of SESA Service Availability	5521
. Employer Inquiry	5521
. Employer Job Order	5521
Farm Labor Employer Activity Outputs	
. FLC Awareness of Registration Requirements	6201
. FLC Registrant Accepted	6201
. FLC Registered with ESA	6201
. FLC Job Orders	6201
Available Job Identification Outputs	
. SESA Awareness of Job Availability	5521

APPENDIX D. CROSSWALK OF ACTIVITIES AND SUBACTIVITIES TO THE SUBDETAIL BAND CODES

(ALTERNATIVES IV, V AND VI)

PROPOSED ACTIVITIES AND SUBACTIVITIES	SUBDETAIL BAND CODES	PROPOSED ACTIVITIES AND SUBACTIVITIES OUPUTS	SUBDETAIL BAND CODES
3. JOB MATCHING PROCESS ACTIVITIES		3. JOB MATCHING ACTIVITY OUTPUTS	
Job Matching Activities		**Job Matching Activity Outputs**	
• Client File Search	5312	• Client/Job(s) Match List	5312
• Job File Search	5312	• Job/Client(s) Match List	5312
• Match Selection	5312	• Match	5312
• Client Call-In	5312	• Schedule of Placement Interview	5312
• Selection Interview	5312	• Order Referral for Clearance	5312
• Clearance for Job Referral	5312	• Interview Scheduled	5312
• Job Interview Scheduling	5312	• Referral to Job Openings	5312
• Referral to Job Opening	5312	• Accompanied Client/SESA Job Interviews	5312
• Client Job Interview Support Visit	5312	• Interview	5312
		• Job Placement	5312
		• Job Verification Form (Verified Job)	5312
		• Retained Job	5312
Verification/Follow-Up Activities		**Verification/Follow-Up Activity Outputs**	
• Job Placement Verification/Follow-Up	5312	• Job Verification Form (Verified Job)	5312
• Employer/Applicant Support	5312	• Retained Job	5312
B. NON-CLIENT SPECIFIC LABOR MARKET EXCHANGE FUNCTIONS			
1. LABOR MARKET INFORMATION ACTIVITY		1. LABOR MARKET INFORMATION OUTPUTS	
• Develop and Disseminate Labor Market Information for:	5611	• Labor Market Information Reports	5611
- Applicants/Public		• Job Information System	5611
- Employers/Industry		• Special Labor Market Reports	5611
- Other Agencies			
• Provide on Request Special Labor Market Information	5611		
2. FARM LABOR WAGE SURVEY ACTIVITIES		2. FARM LABOR WAGE SURVEY ACTIVITY OUTPUTS	
• Conduct Agricultural Wage Survey by Crop	5611	• SESA Awareness of Wage Levels by Crop	5611
• Convey Wage Levels to Applicants	5611	• Applicant Awareness of Wage Levels by Crop	5611
• Publish Finding as Wage Standard by Crop	5611	• Farm Labor Wage Standards by Crop Report	5611

APPENDIX D. CROSSWALK OF ACTIVITIES AND SUBACTIVITIES TO THE SUBDETAIL BAND CODES

(ALTERNATIVES IV, V AND VI)

PROPOSED ACTIVITIES AND SUBACTIVITIES	SUBDETAIL BAND CODES
1. EMPLOYEE (APPLICANT) PROTECTION ACTIVITIES	
. Publish SESA Employee Protection Services	6101
. Accept Employee Complaints	6101
. Resolve SESA Service Complaints	6101
. Refer Employee Complaints to Appropriate Agency	6101
. Follow-Up Resolution of Complaints	6101
2. FARM LABOR (APPLICANT) PROTECTION ACTIVITIES	
. Review Job Orders for Wage Level, Working Conditions, Housing Standards Compliance	6201
. Verify Compliance with Random On-Site Visits	6201
3. FOREIGN TRADE ACTIVITIES (APPLICANT)	
. Collect Data on ILAB on Firms/Unions Adversely Affected by Trade Act	5611
. Determine Applicant Eligibility for Job Search/Relocation Allowances	5611
. Screen Applicants	5611
. Refer Applicants to UI	5611
4. EMPLOYER COMPLAINT ACTIVITIES	
. Accept Employer Complaints Concerning SESA Services	6101
. Review Employer Complaints	6101

PROPOSED ACTIVITIES AND SUBACTIVITIES OUPUTS	SUBDETAIL BAND CODES
1. EMPLOYEE (APPLICANT) PROTECTION ACTIVITY OUTPUTS	
. Employer/Employee (Applicant) Awareness of SESA Employee Protection Service	6101
. Filed Employee Complaint	6101
. Improved SESA Service	6101
. Resolved Employee Complaint - Corrected "wrong" - No "wrong"	6101
. Reported Complaint	6101
. SESA sure of Complaint Resolution	6101
2. FARM LABOR (APPLICANT) PROTECTION ACTIVITY OUTPUTS	
. Job Order in Compliance	6201
. SESA Awareness of Compliance/Non-Compliance	6201
. Reported Non-Compliance	6201
3. FOREIGN TRADE ACT OUTPUTS	
. SESA/ILAB Awareness of Firms/Unions Adversely Affected by Trade Act	5611
. Applicant/Awareness of Allowance Eligibility	5611
. Applicant/UI Referral	5611
4. EMPLOYER COMPLAINT ACTIVITY OUTPUTS	
. Filed Employer Complaint	6101
. Resolved Employer Complaint	6101

APPENDIX D. CROSSWALK OF ACTIVITIES AND SUBACTIVITIES TO THE SUBDETAIL BAND CODES

(ALTERNATIVES IV, V AND VI)

PROPOSED ACTIVITIES AND SUBACTIVITIES	SUBDETAIL BAND CODES
2. EMPLOYER PROCESS ACTIVITIES	
Client-Specific Job Order Solicitation Activities	
. Employer On-Site Visits	5312
. Phone Solicitation	5312
Order Taking Activities	
. Central Order Taking	5311
. Solicitation Order Taking	5311
. Job Bank Input	5313
- Manual	
- Automated	
Employer Technical Assistance Activities	
. Work Force Selection Assistance	5521
. Work Force Development Assistance	5521
. Work Force Utilization Assistance	5521
. Work Force Stabilization Assistance	5521
. Hiring Policy Assistance	5521
. Job Specification Assistance	5521
. Functional Job Analysis Assistance	5521
. Identifying Training and Testing Needs	5521
. EEO Compliance Information Provision	5521
. Affirmative Action Plan Development	5521

PROPOSED ACTIVITIES AND SUBACTIVITIES OUPUTS	SUBDETAIL BAND CODES
2. EMPLOYER PROCESS ACTIVITY OUTPUTS	
Client-Specific Job Order Solicitation Outputs	
. SESA Awareness of Job Availability	5312
. Employer Inquiry	5312
. Employer Job Order	5312
Order Taking Activity Outputs	
. Recorded Order	5311
. Job Bank, Order List	5311
. Job Bank Output	5313
- List Printout	
- List Distribution	
Employer Technical Assistance Activity Outputs	
. Job Orders	5521
. Employer Awareness of SESA Service Availability	5521
. Improved Manpower Resource Utilization	5521
- Restructured Job Content	
- Modified Job Entrance Requirements	
- Altered Job Benefits and Conditions	
- Subsidized Job	
- Job With Tax Credit	
- Employer Awareness of SESA Service Availability	
- Employer Inquiry	
- Employer Job Order	
. Assisted AA Plan Development	5521
. EEO Compliance	

APPENDIX D. CROSSWALK OF ACTIVITIES AND SUBACTIVITIES TO THE SUBDETAIL BAND CODES

(ALTERNATIVES IV, V AND VI)

PROPOSED ACTIVITIES AND SUBACTIVITIES	SUBDETAIL BAND CODES	PROPOSED ACTIVITIES AND SUBACTIVITIES OUPUTS	SUBDETAIL BAND CODES
5. IMMIGRATION/ALIEN CERTIFICATION ACTIVITIES (AGENCY)		5. IMMIGRATION/ALIEN CERTIFICATION ACTIVITY OUTPUTS	
. Receive Requests for Information Requested on Occupations Sought to be Filled by Immigrants	5531	. SESA Awareness of Immigrants Occupational Demand	5531
. Conduct Survey of Domestic Work Availability	5531	. SESA/Immigration Awareness of Domestic Worker Availability	5531
. Determine Potential Domestic Worker Adverse Effect	5531	. SESA/Immigration Awareness of Affect of Immigrant Hire	5531
. Certify Alien Application	5531	. Certification/Rejection	5531
6. LEARNER CERTIFICATION ACTIVITIES (AGENCY)		6. LEARNER CERTIFICATION ACTIVITY OUTPUTS	
. Collect Data for ESA on Experience Worker Availability for Occupation and Industry	5611	. ESA Awareness of Experienced Worker Availability	5611
. Determine "Learner" Availability	5611	. ESA Awareness of Learner Supply	5611
. Supply Certification Information to ESA	5611		
7. DEFENSE MANPOWER POLICY ISSUANCE #4 ACTIVITIES (AGENCY)		7. DEFENSE MANPOWER POLICY ISSUANCE #4 ACTIVITY OUTPUTS	
. Identify High Unemployment Areas Under DMP #4	5511	. SESA Awareness of High Unemployment Areas Under DMP #4	5511
. Publish List of DMP #4 Eligibility Areas	5511	. DMP #4 Eligible Area Publication	5511
. Initial ES/DMP #4 Employer Contact	5511	. DMP #4 Employer Awareness of Preference Certification Requirements	5511
- Mail Contact		. Accepted/Rejected Preference Application	5511
- Personal Contact		. DMP #4 Employer Preference Certification	5511
. Review Preference Application	5511	. SESA Awareness of DMP #4 Employer Compliance/Non-Compliance	5511
. Issue Preference Certificate	5511	. Violations Reported	
. Notify Defense Contract Agency of Non-Compliance	5511		

APPENDIX E

LISTING OF BASIC ESARS DATA ITEMS

Items are listed in the order in which they appear in the manual. Items are not repeated when the item appears twice.

This listing of data items makes up the universe of ESARS data available to the PMS.

FORM ES 511 - APPLICATION CARD

AND

FORM ES 511C - APPLICATION CORRECTION CARD

The application card is completed for all new applicants, including partial application. The form is designed for partial self-completion by the applicant.

The 511C is used to provide data omitted, correct erroneous data, update certain characteristics and record some changes of status. No new items appear on this form.

DATA ITEMS FORM ES 511 APPLICATION CARD		DESCRIPTION
*1.	Social Security Number	
*2.	Applicant Type	- New Applicant
		- Previously Partial Applicant
		- Renewal
3.	Summer Youth	Yes/No
*6.	Name	Last, First, MI
*7.	Address	Number, Name
8.	Telephone Number	Number
*9.	Sex	Male/Female
*10.	Birth Date	Month/Year
11.	Military Service	Month/Year Entered
		Month/Year Released
12.	Citizenship Status	U.S. Citizen/No
13.	Number in Family	Number
14.	Family Income	Annual, Dollars
15.	Earned Farm	Farm, Non Farm
16.	Applicant Has -	Tools
		Auto
		Driver's License
		Chauffer's License
17.	Willing to Relocate	Yes/No
18.	Union Membership	Name/Number
*19.	Highest Grade Completed	Grade
20.	Special Schooling	Name
		Course
		Length
		Date Ended
		Degree

*Filled out on Partial Applicants

DATA ITEMS FORM ES 511 APPLICATION CARD		DESCRIPTION
21.	Occupational Title	Primary/Secondary (3)
22.	Months Experience	Number of Months (by DOT code)
23.	Occupational Code	4,5,6 or 9 digits
*24.	County	Code/Rural or Urban
*25.	Ethnic Group	White
		Black
		American Indian
		Other
*26.	Spanish American	Yes/No
27.	Handicapped	No
		Physically
		Mentally Retarded
		Mentally Restored
28.	Acceptable Occupational Pay	Dollars, Corresponding to Occ. Title
29.	Veteran	No
		Recently Separated
		Vietnam By Disability
		Other
30.	Other Veterans	As noted
31.	Economically Disadvantaged	Yes/No
32.	Welfare	No
		Mandatory WIN
		Voluntary WIN
		Non WIN
		Other
33.	Food Stamps	Yes/No
34.	Seasonal/Migrant Worker	Yes/No
		No
		Farm Worker
		Migrant Farm Worker
		Migrant Food Processor

*Filled out on Partial Applicants

DATA ITEMS FORM ES 511 APPLICATION CARD	DESCRIPTION
35. Registration Date	Month/Date/Year
*36. Employment Status	Part Time
	Full Time
	Not Working
	Job Attachment
*37. Claimant	No
	UI, UCFE, UCX
	SUA, FSB, UCX, UCFE, TRA
38. CETA	No
	ES Prime
	ES Subcontractor for Employment
	ES Subcontractor not for Employment
	No Contractual Agreement
39. Local Office	Identity
40. Station Desk	Interviewer Identification

Previous Job Data -	Employer Name
	Employer Address
	Type of Business
	Duration of Employment
	Ending Date
	Pay
	Reason for Leaving
	Job Title

*Filled out on Partial Applicants

ES 508 - APPLICANT/JOB ORDER TRANSACTION

The job order transaction is used to report all referral and placement data (including mass placements). It is also used:

(1) to report the following transactions:

- job development contacts
- referral to supportive services
- counseling
- testing
- applicants in training
- negative responses and results for food stamp applicants;

(2) record status changes:

- renewal
- inactive
- suspense;

(3) to report changes and corrections;

(4) to report local office contacts, including recontacts; and

(5) to delete inactivations.

DATA ITEMS
FORM ES 508 APPLICANT/JOB ORDER
TRANSACTION CARD

	DESCRIPTION
1. Date	Current Date
2. Local Office	4 Digit Code
3. Station/Desk	Staff Member ID
6. Transaction Code	Add or Delete Activity
7. Job Order Number	Referral Number
8. Occupational Code	6 Digit Code
9. Appointment/Correction Date	Date of Action
10. Clearance	Inter/Intrastate
11. Results	Interview Outcome
12. Referred From	Source of Job
13. Social Security Number	9 Digits
14. Applicant's Name	Surname Plus
18. Mass Transactions	Code
16. Status	Renew, Inactive, Suspense
17. Job Development Contacts	Number
18. Referred to Supportive Service	VIC Rehab, Other CETA
19. Counseling	Individual, Group, Position
20. Testing	SATB, GATB, NATB
	Proficiency BOLT, Other
21. In Training	CETA, Job Corps, Other
22 Food Stamp Applicant	Yes/No

JOB ORDER FORM

ES-514

Designed to record job order information. Completed by the appropriate staff member. Should include both agricultural and non-agricultural jobs.

ES-514C JOB ORDER CORRECTION is used to correct or add data. This form has no new data items.

DATA ITEMS FORM ES 514 - JOB ORDER CARD	DESCRIPTION
1. Job Order Number	Local Office Number
2. Occupational Code	9 Digit Code
5. Employer	Name
6. Employer's Address	Number, Name
7. City	Name
8. State	Name (abbr.)
9. Zip Code	5 digits
10. County	3 Digit Code
14. Occupational Job Title	Title
15. Whom to See	Name
16. Telephone Number	7 Digit
17. Order Taker	Name or Initial
18. Order Time	Hour/Minute
23. Order Date	Month/Day/Year
24. Local Office	4 Digit Number
25. Station/Desk	Name
26. Category	Type of Opening
27. Clearance	Interstate/Intrastate
28. SIC Code	4 Digit Code
29. Ownership	Federal, State, Local, International, Private Sector
30. Delay Verification	Days
31. Openings	3 Digit
32. Number to Refer	3 Digit, Referrals
33. Duration	Days, Specified Range
34. Pay	Minimums specified
35. Unit	Hour, Day, etc.
36. Hours Worked	Number
37. Experience	Minimum Months Required
38. Education	Minimum Years Required
39. Minimum Age	Years
40. Test By	Employer, ES, Other
41. Physical Demands	Various
42. Working Conditions	Describe, Ranges Given
44. Job Summary	Other Information

APPENDIX F

PILOT STUDY DESIGN

This appendix contains the forms and details the procedures used to collect the PMS data on-site. This design has incorporated refinements from the on-site datacollected in Georgia. It was used at two locations in New Jersey.

STUDY DESIGN

The study design utilizes a combination of work measurement techniques in order to both identify the distribution of time between a variety of activities and to identify the specific increments of time spent to process applicants. The distribution of time is required in order to determine the output/input ratios of significant SESA activities. The incremental times are required in order to relate services provided to the value added to the client receiving those services. This latter data can serve as a basis for developing predictions of value added to clients as a function of the services provided and the client profile.

The study design utilizes essentially three separate work measurement techniques which in combination provide a comprehensive description of the agency activities. The time ladder technique is widely utilized as a basis of ascertaining the distribution of time to various activities. The job ticket technique is utilized to teach time expended on specific items or individuals as they flow through a system. The work sampling technique is utilized to identify gaps or services which might not be related to a specific item or individual but must be accounted for never the less.

In establishing the study design for the SESA it is necessary to categorize the major activities in order to better understand the role of the vaious work measurement techniques. We have sequenced the services provided into four major process groups. They are:

- Applicant Process
- Employer Process
- Job Matching Process
- Other

Within each of these groups are a variety of activities. A specific measurement technique is utilized dependent upon the nature of the activities. Exhibit 1 on the following page displays the measurement techniques to be utilized for each activity.

In the data collection process the employees of local office must be segmented much as described in the exhibit. Employees who deal primarily with applicants will be required to utilize job tickets to identify the time expended to provide various services. Employees who primarily take job orders and who interact with the employers primarily by mail or telephone will be required to utilize time ladders. Employees who have personal contact with employers primarily in providing technical assistance will also use job tickets. Some might be required to utilize both.

The entire office will be included in the work sampling study, however, this is an independent effort and will require little if any assistance on their part.

The work measurement study requires a detailed structuring of SESA activities. The structure established is similar to the functional activity codes of the time distribution system but is in much greater detail. In total 34 major activity codes are utilized. Several additional codes are used to identify support and other activities. The significant codes and the definitions are shown in Exhibit 2. A detailed definitional structure corresponding to these codes is given to each employee for reference during the measurement period.

The utilization of job tickets is quite simple. At some centralized point, normally the reception desk a job ticket, shown in Exhibit 3 is attached to each applicant record card. Then as services are provided in support of that applicant the appropriate time is recorded. The significant factors to be kept in mind are first that it is not a measurement of the applicants time to receive services but a measurement of the time spent to provide services. Thus, if self filing is used, the receptionist would only record the time spent in explaining what was required and reviewing the results. Also where more than one applicant is processed simultaneously, i.e., group counseling, the total number of individuals processed should be annotated.

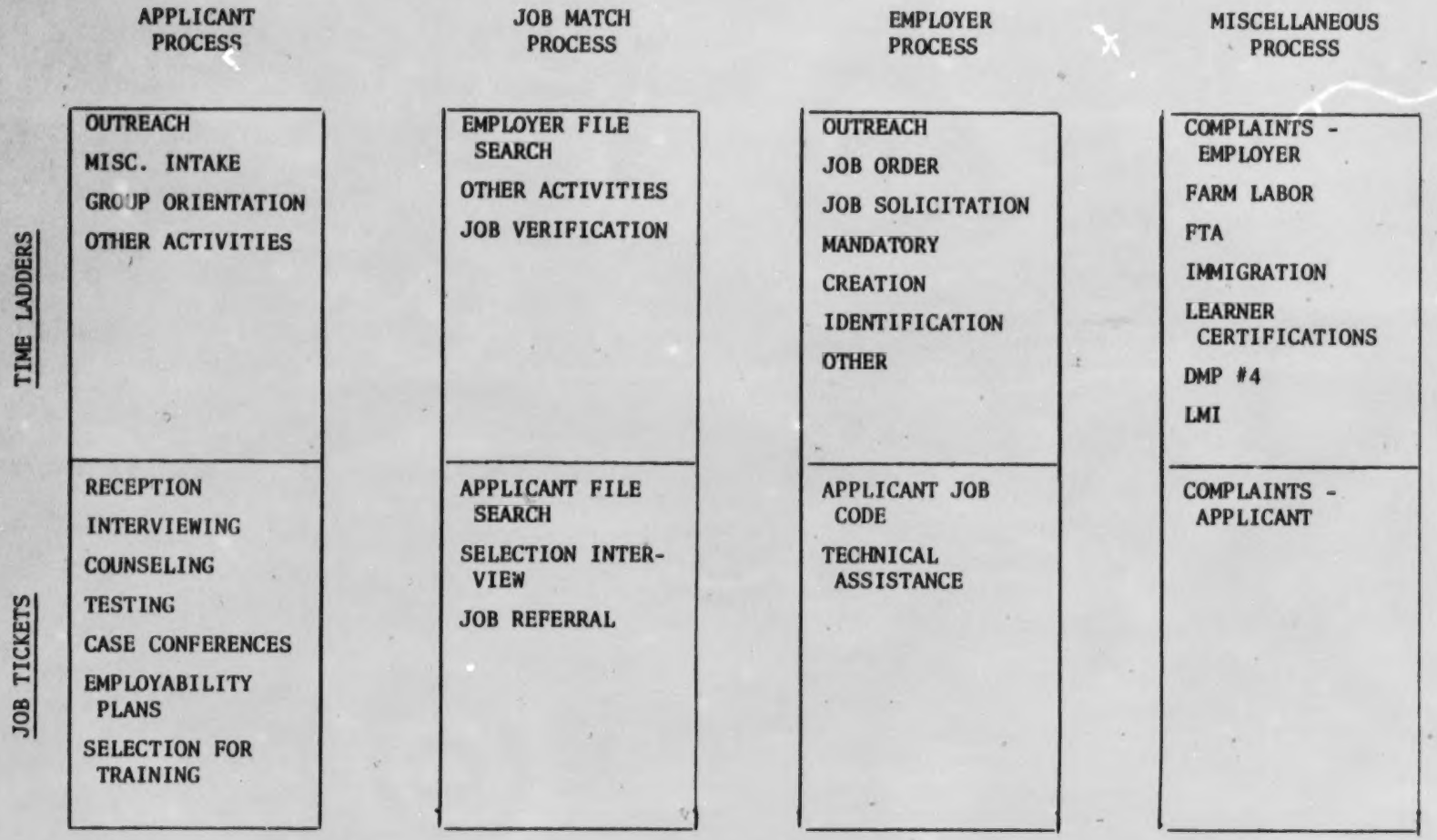


Exhibit 1 Study Design Overview

ES PRODUCTIVITY STUDY - NEW JERSEY

Exhibit 2. Activity Codes

AO - Outreach
AR - Registration
AI - Interviewing
AM - Miscellaneous Intake
AC - Counseling
AT - Testing
CC - Case Conferences
AE - Employability Plans
AG - Group Orientation
AS - Selection for Training
A - Other Applicant Activities

JA - Applicant Related File Search
JE - Employer Related File Search
JS - Selection Interviewing
JC - Job Referral
JV - Job Verification
J - Other Job Matching Activities

EO - Employer Outreach
EJ - Employer Job Order
ES - Employer Job Solicitation
EA - Applicant Related Job Solicitation
EM - Mandatory Job Solicitation
EC - Creation of Job Opportunity
EI - Identification of Available Jobs
ET - Employer Technical Assistance
T - Other Employer Activities

CA - Complaints - Applicants
CE - Complaints - Employer
FL - Farm Labor
FTA - Foreign Trade Act
IC - Immigration/Alien Certification
LCA - Learner Certification
DMP - DMP #4
LMI - Labor Market Information
CS - Community Services

21 - Travel Time
22 - Supervision
23 - Staff Meetings
24 - Routine Reports
26 - Training and Self Development
27 - Assistance to Other Agencies

31 - Personal Time
32 - Delay or Stand-by Time
33 - Lunch

41 - Non-ES Work
42 - Study Time

APPLICANT PROCESS

AO **Outreach Activities**

- spent outside local offices, including initial contact and follow-up; to reach and bring into local offices individuals who do not come on their own initiative but who require assistance to become employable.

AR **Registration Activities**

- spent receiving individuals who come into local offices, making preliminary judgements as to the services needed, and arranging for and scheduling services within the offices.

AI **Interviewing**

- spent in initial or subsequent interviewing of registered, partially registered and non-registered persons to determine their needs for employment services, including completing new or updating former applications and related forms, and referring applicants to appropriate organizational units and/or other agencies for necessary services, (does not include selection interviewing related to employment which is Selection Interviewing).

AM **Miscellaneous Intake Activities**

- spent on miscellaneous activities related to Intake, such as answering telephone calls, referring to other agencies persons who are not seeking employment services, giving out borchures, and other printed materials, and performing other work that involves incidental contacts with the public.

AC **General Counseling Activities**

- includes all time spent in counseling individuals or groups, and such related activities as recording interviews, reviewing and analyzing information on counseling cases, arranging for and referring to supportive services, which includes coaching, that are necessary to assure implementation of the employability development plan and following activities to determine the progress made by counselees in achieving their planned objectives.

AT Testing

- includes all time spent in scheduling, administering, monitoring and scoring tests or work sample exercises, preparing reports of test results for unit activity, and maintaining related files. Also includes time spent advising ES staff as well as employers on tests, testing techniques and related matters. (Includes all time spent in interpreting test results.)

CC Case Conference Meetings

- includes all time spent on case conference meetings (with or without the client being present).

AE Develop Employability Plans

- includes all time spent in developing employability plans (except counseling per se, between the counselor and the client).

AG Group Orientation

- includes all time spent in orientation which is designed generally to provide understanding of those attributes, other then job skills, required to get and hold a job and is normally conducted with groups and covers such matters as personal appearance and health, preparation of job application and related forms, job hunting techniques, wages and taxes, and similar matters of employment related concern. Also includes time spent in group interviewing for the purpose of helping job ready applicants and such special groups as candidates for the summer youth program, to relate their skills to the job market.

AS Selection, Referral and Follow-up for Training

- includes all time spent (except on assessment) in relating applicant needs, characteristics, and circumstances, in the selection and referral to a specific training opportunity. Includes time devoted to development of satisfactory relationships with training facilities and follow-up actions including coaching to assure satisfactory adjustment or progress in training.

A Other Applicant Activities

- includes time spent in support of the applicant processes including filing registration cards, here the time cannot be charged directly. For example filing cards pulled in support of counseling and testing should be charged to A, however, filing new registrations should be charged directly to AR.

JOB MATCHING PROCESS

JA **Applicant Related File Search**

- includes all time spent in searching existing job orders to identify potential job opportunities for an applicant.

JE **Employer Related File Search**

- includes all time spent in searching applicant files to identify potential applicants to fill a job order.

JS **Selection Interviewing**

- includes all time spent to determine if an applicant is qualified for referral to a specific job opportunity. This determination might be required because of jobs identified by the JIS manual or computerized matchings or other sources. Includes time to call in applicants when necessary.

JC **Job Referral**

- includes all time spent in clearing an applicant for referral, scheduling the job interview and making the referral itself.

JV **Verification**

- includes all time spent in follow-up activities to establish that a valid job placement has resulted and that the employer is satisfied.

J **Other Job Matching Activities**

- includes all time spent in support of the job matching process that cannot be identified to a specific code.

EMPLOYER PROCESS

EO Employer Outreach

- includes time spent in developing and maintaining contacts with employers, including employer and union organizations. This includes personal, telephone, or mail contacts of a general promotional nature to develop job opportunities for all applicant groups or to promote acceptance of or participation in special manpower programs.

EJ Employer Job Order

- inclues time spent in taking and transmitting a job order which resulted solely on a voluntary basis from the employer.

ES Employer Job Solicitation

- includes time spent in contacting an employer for the purpose of solicitating a job order not related to an applicant.

EA Applicant Related Job Solicitation

- includes all time spent in contacting an employer to solicitate a job order specifically for an applicant.

EM Mandatory Job Solicitation

- includes all time spent reviewing employer listings and reports, contacting employers, taking and processing orders which may result from contacts or otherwise in conjunction with mandatory listing requirements.

EC Creation of Job Opportunities

- includes all time spent in creation of job opportunities with an employer such as job restructuring requirement modifications, altering job benefits and conditions, setting up subsidized or financial incentive job opportunities.

EI Identification of Available Job Opportunity

- includes all time spent to review classified ads, trade journals, CBC announcements on time spent contacting associations, etc.

ET Employer Technical Assistance

- includes all time to provide technical assistance to an employer including work force stabilization, development utilization and selection assistance. Also inclues time spent assisting on hiring policies, job specifications, functional job analysis and the identification of training and testing needs. Also includes time for EEO compliance and affirmative action plan development.

E Other Employer Activities

- includes time spent in support of the employer not classified elsewhere.

OTHER PROGRAMS

CA — Complaints - Applicants

- includes all time taken to investigate and resolve applicant complaints related to the SESA services.

CE — Complaints - Employer

- includes all time taken to investigate and resolve employer complaints related to SESA services.

FL — Farm Labor

- includes all time spend in support of Farm Labor programs.

FTA — Foreign Trade Act

- includes time to collect and analyze data required to identify firms or unions adversely affected by Trade Acts. Includes time to determine applicant eligibility and other required services.

IC — Immigration/Alien Certification Activities

- includes time to process requests for occupational information, conduct surveys of worker availability, determine potential affects and certify alien applications.

LCA — Learner Certification Activity

- includes all time spent to collect data for ESA on experienced worker availability by occupation and industry. Includes time to determine learner availability and to supply certification information.

DMP — Defense Manpower Policy Issuance #4 Activities

- includes time to identify and publish lists of areas eligible under DMP #4. Includes time to review preference applications, give out certifications, screen hire reports and other activities.

LMI — Labor Market Information

- includes time to develop LMI for the applicant, public and employers, and to provide information by special request.

CS — Community Services

- includes all time spent stimulating community actions, assisting in industrial and deconomic development, establishing a continuing and developmental working relationship with community action groups, training other agency personnel, presenting information to groups, participating in civic functions and dissemination of labor and economic information.

ACTIVITY CODE DEFINITIONS

Indirect Support

The following Indirect Support activity codes describe UI related administrative and training functions.

21 **Travel Time**

- the time spent for travel to and from a point separated from the home offices for the transaction of UI-related activities. Also includes the checking out and return of car to motor pool and preparation prior to the trip and put away after trip.

22 **Supervision**

- planning, directing, instruction on the job and maintenance of quality of operations. Includes preparation of personnel performance and records.

23 **Staff Meetings**

- group staff conferences for the general discussion of policies, procedures, personnel or operating problems.

24 **Routine Reports**

- preparation and verification of activity reports for administrative purposes on a routine daily, weekly and/or monthly basis. Includes preparing daily transmittals to Central Office.

26 **Training and Self-Development**

- time spent in required review of literature, journals, and books for self-development and effective performance. Attendance at formal meetings for the explanation of new procedures, law changes, etc.

27 **Assistance to Other Agencies**

- cooperation with other agencies such as giving explanations on the phone regarding legal matters and all other activities.

Personal and Delay

Charge your time to a Personal or Delay activity code when you are not engaged in work activity.

31 Personal Time

- scheduled or unscheduled periods of personal time, such as coffee breaks, time away on personal business, etc.

32 Delay or Stand-by Time

- unscheduled periods of time when personnel are idle, as a result of waiting for assignments, instructions or work to arrive.

33 Lunch

- scheduled period of time away from work when you normally take your lunch hour. If you work during the usual lunch time, do not use this code. Instead, charge your time to the appropriate product or activity code.

Other

41 Non-ES Work

- time spent on non-ES activities.

42 Productivity Measurement Study Time

- significant amounts of time devoted to preparing time and/or production count reports required for this Productivity Measurement study.

NOTE: A trainee observing activities of a product code should charge time to the product codes in the same manner as the individual performing the product code.

Exhibit 3. Job Ticket

E.S. PRODUCTIVITY STUDY - NEW JERSEY
APPLICANT JOB TICKET

1. Applicant Name _____ 3. Regr. Date / /
2. SSN _____ 4. Control # _____

	Code	Start	Finish	Comments
1.		:	:	
2.		:	:	
3.		:	:	
4.		:	:	
5.		:	:	
6.		:	:	
7.		:	:	
8.		:	:	
9.		:	:	
10.		:	:	

E.S. PRODUCTIVITY STUDY - NEW JERSEY
EMPLOYER JOB TICKET

1. Employer Name _____ 3. Date / /
2. Employer Address _____ 4. Control # _____

	Code	Start	Finish	Comments
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

The completed job tickets can be picked up at the end of the measurement period. To identify their location, however, it is necessary to maintain a log of the job tickets shown in Exhibit 4. In this manner all job tickets can be accounted for. Since all individuals processed generally go through a central point, the receiptionist, it is unlikely that job tickets might need to be initiated at another point for the applicant. However, if this is the case, the ticket must be recorded on the central log book.

Job tickets utilized for employer services provided outside the agency must be controlled through a centralized point. Employees contacting employers should initiate job tickets as required. Following completion of the task the completed job tickets will be logged in the control point.

Time ladders shown in Exhibit 5 are to be utilized by employees not directly related to the applicant process. Those using time ladders will be required to account for all of their time expenditures throughout the study period. In using the time ladder a horizonal line is drawn starting from the beginning time for an activity across the "code" column. When the task is completed a second line is drawn and the appropriate code for the activity is written between the two lines. It is not necessary to draw separate lines for each item processed. Other activities including personal time, leave, lunch and coffee breaks must also be accounted for. Detailed instructions, shown in Exhibit 6, on the use of time ladders are provided to the employees.

Work sampling studies will also be conducted during the measurement period. At randomly selected times during each day, each employee will be observed and the specific activity being conducted at that instant will be recorded. This may require some interaction between the work measurement analyst and the employee to identify the activity. A typical form for work sampling is shown in Exhibit 7. Opposite the corresponding time and the individual employee a code, designating the

activity will be inserted into the box. The results will be summarized and utilized to determine the distribution of time. Individuals utilizing time ladders will not need to be work sampled. Instructions for the work sampling are shown in Exhibit 8.

Exhibit 4. Applicant Control Sheet

Control #	Name	SSN	Reg. Date		Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Exhibit 5. Time Ladder

NAME: _____ CLASSIFICATION: _____ DATE: _____

SECTION: _____ UNIT: _____ TOTAL MINUTES: _____

TIME	CODE	TIME	CODE	TIME	CODE
7:00		11:00		3:00	
:05		:05		:05	
:10		:10		:10	
:15		:15		:15	
:20		:20		:20	
:25		:25		:25	
7:30		11:30		3:30	
:35		:35		:35	
:40		:40		:40	
:45		:45		:45	
:50		:50		:50	
:55		:55		:55	
8:00		12:00		4:00	
:05		:05		:05	
:10		:10		:10	
:15		:15		:15	
:20		:20		:20	
:25		:25		:25	
8:30		12:30		4:30	
:35		:35		:35	
:40		:40		:40	
:45		:45		:45	
:50		:50		:50	
:55		:55		:55	
9:00		1:00		5:00	
:05		:05		:05	
:10		:10		:10	
:15		:15		:15	
:20		:20		:20	
:25		:25		:25	
9:30		1:30		5:30	
:35		:35		:35	
:40		:40		:40	
:45		:45		:45	
:50		:50		:50	
:55		:55		:55	
10:00		2:00		6:00	
:05		:05		:05	
:10		:10		:10	
:15		:15		:15	
:20		:20		:20	
:25		:25		:25	
10:30		2:30		6:30	
:35		:35		:35	
:40		:40		:40	
:45		:45		:45	
:50		:50		:50	
:55		:55		:55	
11:00		3:00		7:00	

Exhibit 6. Time Ladder Instructions

During the next several days we will be conducting a productivity measurement study of all Employment Service activities in this office. The purpose of this study is to determine the productivity of various types of ES services in greater detail than is now available. This data is necessary to establish an objective method to determine manpower requirements in different labor market areas.

You will participate in this study by identifying how you spend your working hours during the study period. Time codes have been developed which relate to either the products you work on (e.g., applicant intake, counseling, etc.) or the activities you engage in. You will be provided with time ladder forms to record your time during the study period.

These are your detailed instructions for coding your time and filling out the time ladder:

1. Familiarize yourself with the process codes and their definitions. The codes are divided into product codes and activity codes. The product codes generally relate to work done on a specific unit of production. Activity codes relate to more generalized work (sorting mail), to indirect support (staff meetings), and to personal and delay time (lunch).

2. Fill out the heading of the time ladder each day with your name, classification, date, section, division, and unit names. At the end of the day, fill in the total time spent on the job, in minutes.

3. The time ladder begins at 7:00. If your starting time is after 8:00, but you actually begin working at 7:50, for example, draw a line opposite the 7:50 time slot across the "Code" column.

4. Enter the proper product code or activity code in the code column to describe how you spent your time.

5. When you change from one code to another, draw a line across the code column (thus forming a ladder) and enter the new code number you are working on. Draw a line across the code column only when you change from one code to another.

6. The time ladder is divided into five minute segments. Do not try to record your time to codes that you work on for less than three minutes. If you work on many different codes for short periods of time (less than 3 minutes) see your representative from the study team. He will help you estimate the amount of time spent on each code.

7. Report the total time you spent on the job from the time you arrive to the time you leave. If you start before 7:00 a.m., or work after 7:00 p.m., enter the times and codes worked on the back of the time ladder form.

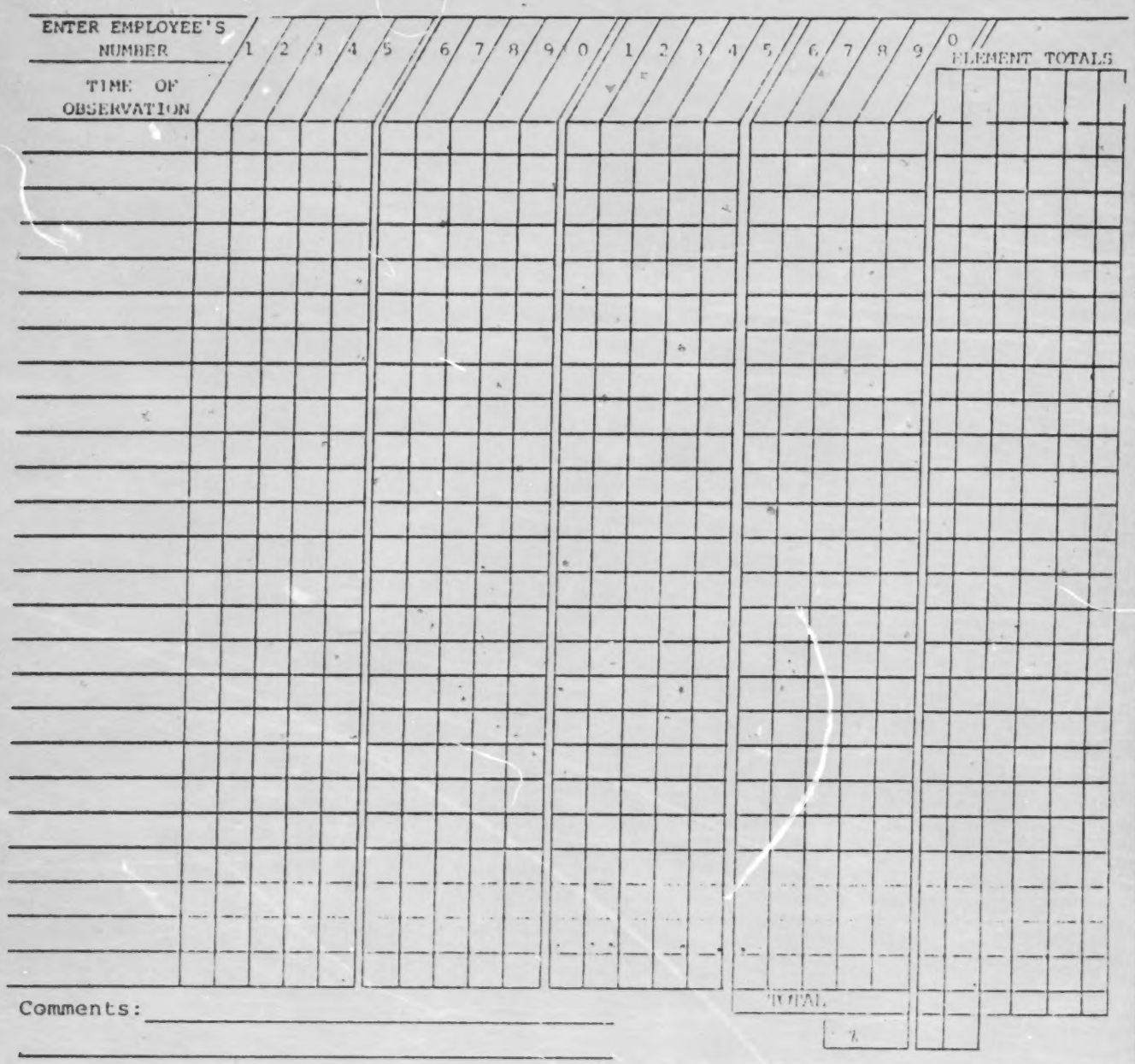
8. Please keep your time ladders current. The results of this study depend heavily on accurately completed time ladders.

9. If you have any questions on filling out this time ladder or appropriate codes to be used, ask the representative from the study team.

10. To assist your monitor, please keep your time ladder in plain view.

Exhibit 7. Work Sampling Worksheet

ORGANIZATION: _____
UNIT: _____
DAY: _____
DATE: _____
OBSERVER: _____



Comments: _____

%	x		=	
TIMES		EMPLOYEES		OBSERVATIONS

Exhibit 8. Planning the Work Sampling

Work sampling is based upon the random sampling theory and the law of probability. The classic example of the law of probability is the tossing of a coin. If a coin is tossed an infinite number of times, the probability is that the number of heads versus tails will be equal. However, using statistical sampling formulas, it is possible to determine an approximate ratio of heads to tails after a limited number of tosses (or samples). As the number of samples or chances increase, we can have a higher degree of confidence that the characteristics of the sample actually resemble the characteristics of the whole.

Standard formulas are available so that we can calculate the sample size required for a 95% confidence level. This means that if we obtain a certain sample size, the answer will be correct in a calculable range of error 95 times out of 100. The steps for preparation for work sampling follow.

. Determine the number of observation cycles required. For our purposes, we wish to determine the percent of time the employees are engaged in specific activities. If we estimate that the time will be no less than 30% of the total time, it will be necessary to make a total of 2,000 observations in each study office to give us a confidence level of 95%, within $\pm$ 2% absolute accuracy.

It will be necessary to determine the number of observation cycles per day required. First, determine the number of employees in the organizational unit

to be studied. Second, calculate the number of observation cycles required for a five day work sampling, according to the following formula:

- 2,000 individual observations ÷ by the number of individuals to be studied = total number of observation cycles. This answer ÷ 5 days = the number of observation cycles to be conducted daily.

- Example:

$$\frac{2000 \text{ observations}}{16 \text{ individuals}} = 125 \text{ cycles}$$

$$\frac{125 \text{ cycles}}{5 \text{ days}} = 25 \text{ cycles per day}$$

. Randomizing the times of observation. To accomodate the law of probability there are two requirements related to the observations. They are:

- the activity recorded should be based upon the first impression at the instant the employee is observed, and

- the observations should be made at random during the work day.

To avoid biasing the study by making observations during the busy times or slack times of the day the table of random numbers should be used to select times of observation. It may be necessary to discard observation cycles which fall outside of regular working hours, or those which occur too close to permit performance. It will be necessary to replace the deleted times in order to have the full number of cycles.

. Recording the observations. Following is a brief summary of the work sampling instructions.

- Familiarize yourself with the code structure to be utilized. These elements are the codes you will use to describe employees' activity. During the observation cycles you will observe each employee in the work area and code his activity to one of these elements.

- On your scheduled work sampling days, enter each employee's name in the columns across the top of the Work Sampling Worksheet. Enter all employees who are utilizing job tickets (not time ladders).

- Watch the clock closely so you do not miss any of your scheduled observation cycle time.

- When the time comes for an observation cycle, locate each person at the top of your worksheet and observe his activity. Determine what he is doing the instant your eyes strike him and record that activity in terms of the codes. It is extremely important that you record what the employee is doing the instant you see him. Do not record what he is going to do, what he should do, or what you expect him to do.

- After you have recorded the first person's activity locate the next person on the sheet and repeat the procedure. Continue until all employees are accounted for.

- Repeat the procedure for each observation cycle.

- Occasionally you will have observation cycles before some employees are scheduled to arrive, or after some employees have left for the day. If this occurs, simply make observations of the employees who are present. For those employees who have not arrived or have left, enter code 0 in the box where you would have normally recorded their activity.

- If an employee is out of the work area during an observation cycle, you should code the observation as element 0, unless you can determine the whereabouts of the employee from the supervisor (for example, at coffee break or lunch). Otherwise, the following day after you have received each employee's time ladder, you should check to see how the employee charged his time each time you recorded an 0 for him. If he coded his time to the activity code for personal time, then change the 0 that you recorded. If the employee was on his normally scheduled lunch time, change the observation code appropriately. Do not try to track employees down in the lunch room, coffee shop or restroom during your observation cycles.

- If the entire operation closes down for the lunch period, it will not be necessary to make observations during that period. If the employees are on staggered lunch periods, however, you will make a continuous work

sampling. Use Code 33 when an employee is on his normally scheduled lunch time. If he leaves early or returns late, use the 33 to so indicate. It will be necessary to stagger your own lunch break on the days of the work sampling observations, to avoid "missing" the same clock time each day of the study.

As one result of the study it is desirable to identify unit times to process applicants through the Employment Service. This can later be utilized to identify the relationship of service provided and value added to the client. To achieve this it is necessary to identify the output units of the office. For each activity a specific unit of output has been identified and described. Some are available from ESARS, others must be collected through special count points. Exhibit 9 describes the required workload counts and the collection points. Tally sheets shall be given to each employee daily for collection of count information.

Exhibit 9

CODE	DESCRIPTION	COUNT DESCRIPTION	SOURCE
AO	Outreach	No specific output unit identified	-
AR	Registration	Talley the number of individuals who register with the ES. Identify partials, renewals and new registrants.	ES 511
AI	Interviewing	Tally the number of individuals who are initially interviewed as part of the registration process.	Counted by employees
AM	Miscellaneous Intake	No specific output unit identified	-
AC	Counseling	Tally the number of individuals who are counseled by the ES. indicate if the counseling is a continuation of or initial session and if the counseling is completed. Identify also the type of counseling.	Counted by employees ES 515
AT	Testing	Tally the number of individuals who are tested and the number of tests administered by type.	Counted by employees ES 515
CC	Case Conferences	Tally the number of conferences held	Counted by employees
AE	Employability Plan	Tally the number of employability plans developed.	Counted by employees
AG	Group Orientation	Tally the number of group orientation sessions and the total number of applicants receiving orientation	Counted by employee
AS	Selection for Training	Tally the number of applicants processed for testing and the total number enrolled during this period.	Counted by employee ES 515
A	Other Services	No specific output unit identified	-

CODE	DESCRIPTION	COUNT DESCRIPTION	SOURCE
JA	Applicant Related File Search	Tally the number of applicants for which the job files are searched.	Counted by employee
JE	Employer Related File Search	Tally the number of employer job orders for which the applicant files are searched	Counted by employee
JS	Selection Interviewing	Tally the number of applicants interviewed to determine their qualifications for a specific job. Tally also the total number of jobs for which applicants were interviewed.	Counted by employee
JC	Job Referrals	Tally the number of applicants referred to jobs. Count each referral separately. Talley placements.	Counted by employee ES 515
JV	Job Verification	Tally the number of placements verified. Tally the number which could not be verified.	Counted by employee ES 515
J	Other Job Matching Activities	No specific output unit identified	-
EO	Employer Outreach	No specific output unit identified	-
EJ	Employer Job Order	Count the number of job orders that were received without direct solicitation.	Employer Count ES 514
ES	Employer Job Solicitation	Count the number of employers contacted to solicite jobs and the number of job orders received.	Employee Count ES 514
EA	Applicant Related Job Solicitation	Count the number of employers contacted to solicitate job orders for specific applicants and the number of job orders received as a result.	Employee Count ES 514
EM	Mandatory Job Solicitation	Count the number of job orders which are a direct result of job creation activities.	Employee Count ES 514

CODE	DESCRIPTION	COUNT DESCRIPTION	SOURCE
EC	Job Creation	Count the number of job orders which are a direct result of of job creation activities.	Employee Count ES 514
EI	Identification of Available Jobs	No specific output unit identified	-
ET	Employer Technical Assistance	Count the number of employers to which technical assistance was provided, identify services.	Employee count
E	Other Employer Activities	No specific output unit identified	-
CA	Complaints - Applicant	Count the number of complaints processed	Employee count
CE	Complaints - Employer	Count the number of complaints processed	Employee Count
FL	Farm Labor	Count the number of applicants processed	Employee Count
FTA	Foreign Trade Act	Count the number of investigations conducted and the number of applicants processed.	Employee Count
IC	Immigration Certification	Count the number of immigrants processed	Employee Count
LCA	Learner Certification	Count the number of applicants certified	Employee Count
DMP	DMP #4	Count the number of investigations conducted and count the number of applicants processed	Employee Count
LMI	Labor Market Information	No specific output unit identified	-

Exhibit II-10. Talley Sheet

Date __/__/__

Name _____

Registration Count				**Total**		
New						
Renewal						
Partial						
Interview Count				**Total**		
Interviews						
Counseling Count				**Total**		
	Initial	Continuation	Completion	Initial	Continuation	Completion
Occupational						
Vocational						
Testing Count				**Total**		
Individuals						
SATB						
GATB						
NATB						
PROF						
BOLT						
Other						
Individuals						
Case Conferences Count				**Total**		
Conferences						
Employability Plans Count				**Total**		
Plans						

Group Orientation	Total
Sessions _____	_____
Individuals _____	_____
Selection for Training	Total
Applicants _____	_____
Enrolled _____	
Applicant Related File Search	Total
Applicants _____	_____
Employer Related File Search	Total
Employer Job Orders _____	_____
Selection Interviews	Total
Inverviews _____	_____
Job Orders _____	_____
Job Referrals	Total
Referrals _____	_____
Placements _____	_____
Job Verifications	Total
Placements Verified _____	_____
Placements Not Verified _____	_____
Job Order Count	Total
Unsolicitated _____	_____
Solicitated Job Orders _____	_____
Soliciated Employers _____	_____
Applicant Related Solicitation (Employer Contacts)_____	_____
Applicant Related Solicitation (Job Orders) _____	_____

Job Order Count (Continued)	Total
Mandatory Listings Job Orders	
Job Creation Related Job Orders	

Employer Technical Assistance Count	Total
Selection Assistance	
Development Assistance	
Utilization Assistance	
Stabilization Assistance	
Hiring Policy Assistance	
Job Specification Assistance	
Functional Job Analysis Assistance	
Identify Testing & Training Needs	
EEO Compliance Assistance	
Affirmative Action Assistance	

Complaints Count	Total
Applicant	
Employer	

Farm Labor Count	Total
Applicants	

Foreign Trade Act Count	Total
Investigations	
Applications	

Immigration Certification	Total
Applicants	

Learner Certifications	Total
Applicants _____	_____
DMP #4	
Investigations _____	_____
Applicants _____	_____

The productivity model requires the collection of additional data concerning the characteristics of the applicants processed and the characteristics of the employers serviced. Two distinct efforts are required to collect this data primarily because no single source such as ESARS is available on employer characteristics.

The ESARS data to be collected is two-fold. First it is necessary to collect information on the characteristics of and level of service provided to applicants who are served during the period. This data will be used to establish the total value of services provided to applicants. Copies of the most recent ESARS reports have all the required data. Specifically the following reports are required.

Table 03 Placement and Referral of Individuals

Table 04 Individuals enrolled in Training or Placed in Special Class of Openings

Table 05 Applicants Provided Counseling, Testing and Related Services

Table 11 Summary of Services

The utilization of job tickets allows the incremental times for services to be related to the individuals to which it was provided. This then can be related to the individual and characteristics and the benefits resulting from the services themselves. To achieve this data from ESARS individual registration forms makes a valuable data set. The ES 511 provides most of the essential data. Following completion of the test period the ES 511 should either be copied or all essential data transposed. This then should be matched with the services provided. Any placement information subsequent to this period should also be obtained, however, additional SESA services or outside services must be identified and discounted.

The lack of basic employer data necessitates the utilization of a comprehensive questionnaire for use with employer technical services. All employers who receive services for which the job ticket is utilized must be included. Exhibit 11 shows the employer questionnaire.

Exhibit 11

EMPLOYER QUESTIONNAIRE

Employer _____ Date _____

Address _____ Completed by _____

1. What is the total number of employees at this location? _____

2. What is the distribution of workers?
   - Unskilled _____
   - Semi-skilled _____
   - Skilled _____
   - Professional _____

3. Does the employer use migrant workers? _____
   - Seasonal Workers _____

4. Are the workers affiliated with a union? _____

5. What is the average wage paid?
   - Unskilled _____
   - Semi-skilled _____
   - Skilled _____
   - Professional _____

6. What is the turnover rate? _____
   - Quit Rate _____

7. What is the organization's structure (corporation, partnership, sole-proprietership, nonprofit)? _____

8. Does the employer do government contract work? _____

9. How many years has the employer been in business? _____

10. What is the employer SIC code? _____

11. What is the size of the personnel staff? _____

12. What is the average wage paid for the personnel department? _____

13. What is the estimated budget for the personnel department excluding staff?

    Advertising _____

    Agency Fees _____

    Training _____

    Other _____

14. Does the employer regularly use ES services? _____

15. For a job opening what percent of the time is the job advertised with

    ES _____

    Outside Placement Agency _____

    Advertised _____

16. What is the proximity to the ES local office in miles? _____

Other data concerning the distribution of time and costs are required. The Cost Center time report 03 provides the total hours paid and equivalent positions by activities and should be obtained for the period being studied. The Reports 61, 92 and 96 are required to compute the average daily cost per position.

These reports can be used to compute the average cost per man-year for each program administered by the State agency. The cost per man-year is equal to the Total Funded Costs (personal services excluding annual leave earned, personnel benefits, nonpersonal services, and annual leave taken divided by the number of man-years paid. However, this calculation cannot be directly obtained using the information available. Instead, cost per man-year can be calculated using the information contained in these reports by annualizing the average daily cost per position. To obtain the average daily cost per position, the montly cost per position must first be computed using Reports 61, 92 and 96. The monthly cost per position is obtained by dividing this month's Total Funded Costs by this month's paid equivalent positions on Report 96. Because the "total (funded) Costs" on Report 95 does not include the cost of annual leave taken, this cost must be added from the appropriate fund ledger in Report 61 to obtain the Total Funded Costs for the appropriation.

$$\frac{\text{Total Funded Costs}}{\text{Paid Monthly Equivalent Positions}} = \text{Monthly Cost Per Position}$$

$$\frac{\text{Monthly Cost Per Position}}{\text{Standard Number of Days in the Month}} = \text{Average Daily Cost Per Position}$$

The cost per man-year is obtained by annualizing the average daily cost per position.

$$\text{Average Daily Cost Per Position} \times \text{Standard Number of Days in a Year} = \text{Cost Per Man-Year}$$

To obtain the cost per man-year for a previous year, simply divide the the year-to-date Total Funded Costs obtained from Reports 95 and 61 with the paid YTD equivalent positions on Report 96.

$$\frac{\text{Total Funded Costs}}{\text{Paid YTD Equivalent Positions}} = \text{Cost Per Man-Year}$$

III. INSTRUCTIONS FOR DATA COLLECTION, REDUCTION AND ANALYSIS

We discuss the specific techniques for data collection in the pages which follow. The study plan has been separated into seven distinct steps. These include:

- Orientation
- Preparation
- Measurement
- Data Recap
- Data Reduction
- Report Preparation

Each of these steps are discussed in detail below:

1. Orientation

The importantce of a complete and comprehensive orientation cannot be overemphasized. It is first necessary to brief the ES Director and his staff. During this orientation the basic concepts of the model, individual productivity ratios, value added, and component weights should be discussed. The solicitation of support in terms of staff participation would be valuable in the ultimate acceptance of the project.

It is also necessary to select a local office site for the study. The selection should consider three important points, type of service, size of the office and type of applicants. The considerations under type of service should emphasize the selection of an office with a full range of ES treatments. This is important in order to test the model under all types of ES treatments.

The next step in the process is to orient the local office manager and staff at the test site. This orientation should include the same topics as the previous orientation for the ES Director but should include a deatiled discussion of the measurement techniques and data requirements

as well. Emphasis should be placed on the fact that the study does not emphasize individual productivity and that they should not change their normal routine to accomodate the study.

During the orientation for the local office staff, a discussion should be held concerning the use of time ladders, job tickets, and work sampling in work measurement and the need for product counts.

Emphasize that the study is not to disrupt their normal activiites. Also emphasize that it is desirable to keep their time ladders and job tickets as current as possible and to contact the study monitor if they have problems.

2. Preparation

Every SESA agency operates differently. In fact, it is likely that within an agency individual local offices might operate differently to accomodate the specific area labor market. Following the orientation, the study team should review the specific operations to determine the extent to which that operation corresponds to the system flow developed for the project. This step is necessary to insure that the product code structure established for use is compatible with the local office operation. It is also necessary to establish the specific product counts. The product count descriptions and locations must be carefully scrutinized to insure that the data is available at the local office. Work in process must be monitored. For example, a system to differentiate between the continuation of counseling activity as opposed to a new counseling activity for an individual must be established.

In larger offices there exist some jobs which actually support a variety of activities, for example, sorting mail. These must be identified and a system of sampling used as a basis to allocate that time back against the proper activities. Special studies such as these should be established at this time.

ESARS data from the most recent month must be obtained for the site being measured. Specifically ESARS reports number 03, 04, 05, 11 are necessary for the compilation of the value to be added for each output unit produced. Cost data from the most recent month must also be obtained. Specifically cost accounting reports 61, 92, 95 and 96 are required. Arrangements for the availability of this data should be made in advance.

3. Measurement

The measurement period will vary according to the schedules of individual test sites. However, regardless of the length of the study itself, it is imperative to account for all inputs and outputs for the study period itself. ES staff members should record time for all work performed even outside normal agency work hours. In addition, all outputs produced during the period must be identified.

The study monitor must insure the time ladders and job tickets are available to the study participants the day prior to the study. Study participants should keep the time ladders and job tickets current and in plain view. The monitor should position himself in view of the participants if possible. In this manner his assistance can normally be obtained without disrupting operations. The monitor should circulate at least once per hour to view the ladders to insure their accuracy. Emphasize that the participants should make notes on points of question for resolution at a later time.

The importance of accurate product counts cannot be overemphasized. The study monitor must clearly define each of the outputs prior to the measurement period. Once the study is underway the monitor must take time to determine that the count definitions are accurately adhered to. There is often a tendency to over report product counts. No one likes to admit it if they do not attain their expected output. Credit, however, should not be taken for work not yet completed. This is accounted for by the work in process adjustments.

Additional data other than ESARS will be required for the value added process. This data will include pertinent characteristics of the employers contacted during the measurement period. The data will be collected by use of a questionnaire to be completed where possible for employers who receive assistance during the study.

4. Recap Daily Totals

In order to insure consistent reporting and to readily and timely identify problems, it is necessary to conduct a daily recap of the totals. Each time ladders should be collected at the end of the day and re-capped. The monitor should add the number of minutes charged to each code and summarize the results at the bottom of the ladder. The total minutes shown in the summary should correspond to the total minutes charged during the day.

Following completion of the recap of the time ladders, the results should be posted to the daily recap sheet, Exhibit 1. The total minutes for each activity and product code whould be summarized across the page. These totals can be summed down the page and cross-checked against the total time charged by all employees. Errors must be resolved.

The daily recap sheet should next be posted onto the MIS sheet, Exhibit 2. The MIS sheet allows for a visual check of the time and product counts for each day. The MIS sheet also provides for the calculation of running totals. Again totals should be summed down and cross-checked against the column totals. This prevents any errors in posting or summation of totals.

The work sampling sheets should be summarized each day. The percentages, however, should not be calculated until the end of the measurement period since daily totals have no significance.

DAILY RECAP SHEET

SECTION: DATE: 10/2

PRODUCT CODE	BROWN	JONES	SMITH	ADAMS
60	55	80	110	160
430	70	70	30	50
LTR	140	170	185	110
RATE	105	60	-0-	-0-
111	75	40	-0-	-0-
11	-0-	-0-	60	-0-
12	20	-0-	-0-	-0-
13	-0-	-0-	-0-	45
TOTALS	510	480	480	450

SHEET: ____ OF: ____ MONITOR: ____

SUMMARY		
TIME	COUNT	
1590	25	
80	3	
2340	43	
945	72	
580	8	
-0-	-0-	-0-
715	-0-	-0-
495	-0-	-0-
15265	151	

Exhibit 1

Exhibit 2

MIS LEDGER

SECTION _____ DATE _____

Product Code		10/2	10/3	Sub Total	10/4	Sub Total	10/5	Sub Total	10/6	Sub Total	Grand Total
	MIN	13740	1830	3580	1800	5380	2295	7675	1725	9400	77260
60	COUNT	29	33	62	36	98	30	128	26	154	8535
	MIN	840	1855	2695	2335	5030	240	5270	3145	8415	61560
430	COUNT	3	4	7	4	11	2	13	3	16	855
	MIN	2340	2330	4670	1830	6500	2180	8730	2330	11060	117360
178	COUNT	47	84	131	68	199	105	304	62	366	17702
	MIN	945	720	1710	935	2645	1440	4085	740	4825	32440
1778	COUNT	72	355	436	824	754	395	1149	135	1284	10756
	MIN	550	575	1125	950	2075	270	2345	115	2460	19560
111	COUNT	8	9	17	56	73	41	114	24	138	8130
11	MIN	-0-	-0-	-0-	30	30	55	125	20	145	310
	%	-0-	-0-	-0-	.31	.04	5.5	2%	.83	.25	.21
12	MIN	2145	800	2945	2345	5290	2220	7510	1010	8520	14100
	%	4.68	3.72	2.32	2.32	2.32	4.68	4.38	4.53	4.52	3.29
13	MIN	5130	2355	7485	1230	5220	2510	14110	3405	17515	60230
	%	3.34	1.84	2.56	.9%	2.01	3.22	2.%	2.%	2.43	2.33
TOTALS	COUNT	1311	1413	2724	1482	4206	1281	5487	1262	6749	275511
TOTALS	MIN	32762	15870	48632	36013	84645	22975	107620	23758	131378	4253320

The job tickets are not collected until the end of the measurement period. At this time each job ticket must be accounted for to insure all activities are adequately accounted for.

5. Data Reduction

The flow of data through to the development of productivity ratios is shown in Exhibit 3. The schematic illustration shows the role of each of the data collection techniques and the adjustment factors. After the data is accumulated the actual development of productivity ratios can begin. The base amount of data processed makes it advantageous to utilize dual data summarization techniques. This ensures that the results are accurate since two distinct and separate techniques are used. The results of the techniques will be the same provided as clerical errors occur.

Step-down allocations allows the analyst to develop the productivity ratios working with total time values and total counts. All totals are carried to the end where the ratios are then developed. Exhibit 4 shows the role of the Work in Process (WIP) Adjustment and the Work Sampling (WS) Adjustment. Exhibit 5 shows the summary sheet.

Product Time Summary (PTS) sheets allow the analyst to develop the productivity ratios working with individual productivity ratios and mathematically combining them. Exhibit 6 shows the PTS sheet.

The net result of the Step-down allocation process and the Product Time Summary Process is the same. At the completion of these tasks a productivity ratio is developed which represents the number of units processed per minute. This is the basis productivity measure or ratio.

The next step in the PMS process is the assignment of a value for each productivity ratio. The value "assigned" or "added" technique is discussed in detail in the section which follows. In essence, however, it utilizes subjective and objective techniques to assign values to various SESA outputs based on the value of services provided to a client or the difficulty of applying the services. This value can be applied to each ratio in order to arrive at a valued productivity ratio. These valued productivity ratios are then added to give a total valued productivity ratio for each of the four distinct SESA processes; applicant processes, employer processes, placement processes and legislatively mandated processes.

These four distinct ratios are then weighted by the process by assigning values to SESA objectives through the DELPHI technique and relating the objectives to the four process areas. This is also discussed in the following sections.

SCHEMATIC ILLUSTRATION OF PRODUCTIVITY RATIOS

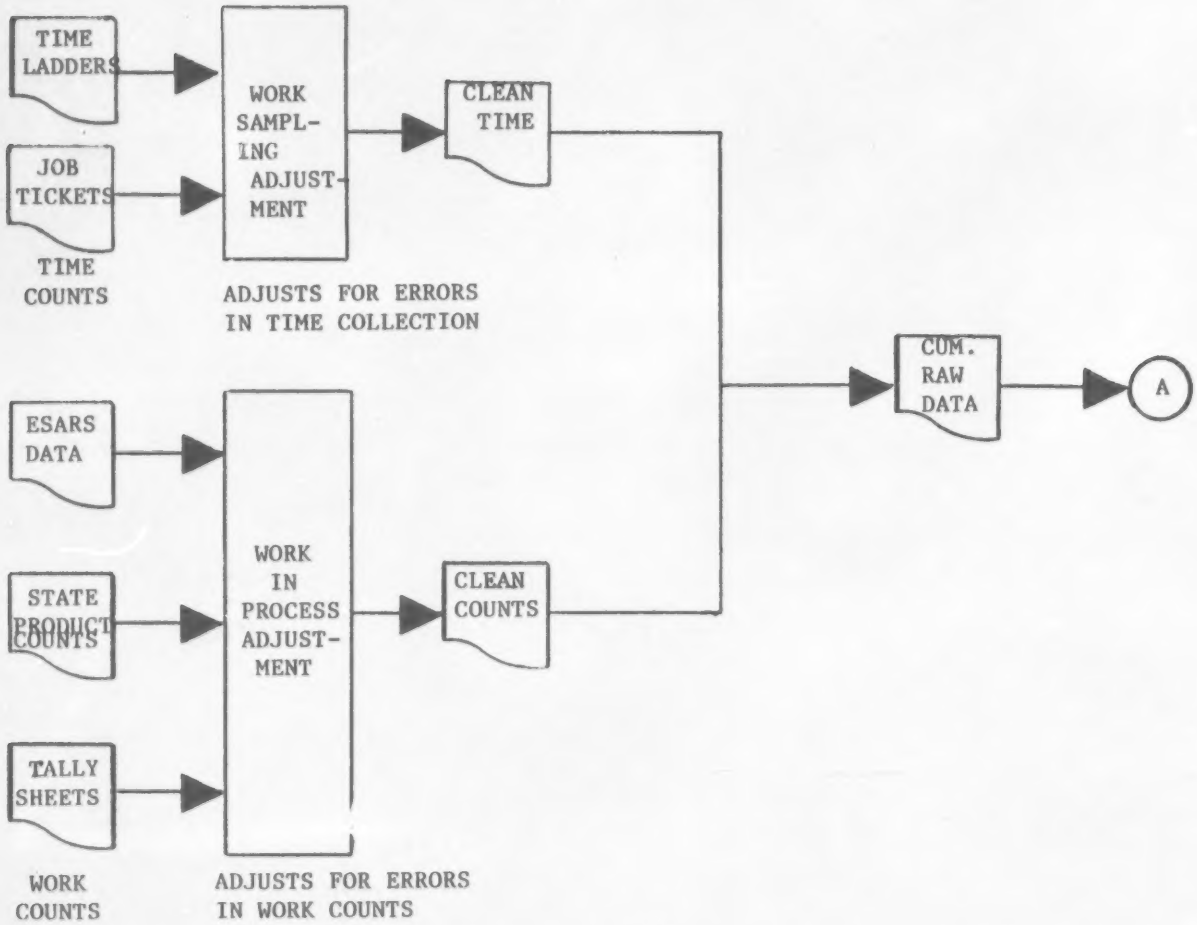
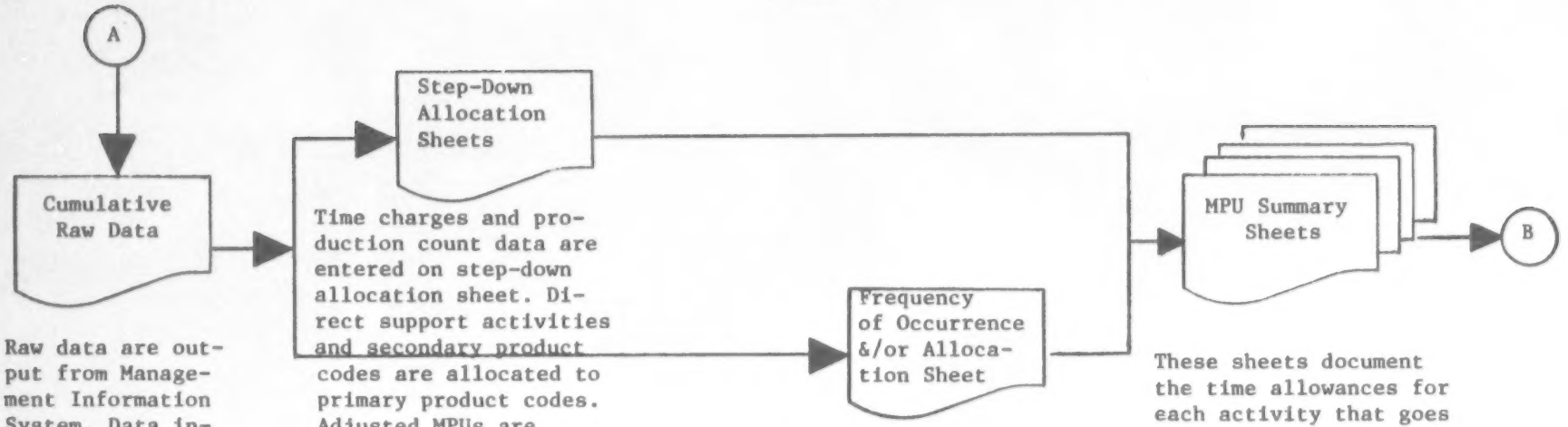


Exhibit 3
Page 1 of 3

SCHEMATIC ILLUSTRATION OF PRODUCTIVITY RATIOS

(Continued)


A
Cumulative Raw Data
Raw data are output from Management Information System. Data include time charges DOT code, and production counts from each cost center studied.
Step-Down Allocation Sheets
Time charges and production count data are entered on step-down allocation sheet. Direct support activities and secondary product codes are allocated to primary product codes. Adjusted MPUs are calculated.
Frequency of Occurrence &/or Allocation Sheet
This sheet documents the allocation methods and describes frequencies of occurrence for secondary products.
MPU Summary Sheets
These sheets document the time allowances for each activity that goes into producing a primary product. One summary is needed for each primary product in each organization studied. The sum of these allowances equals the adjusted MPUs.
B

SCHEMATIC ILLUSTRATION OF PRODUCTIVITY RATIOS
(Continued)

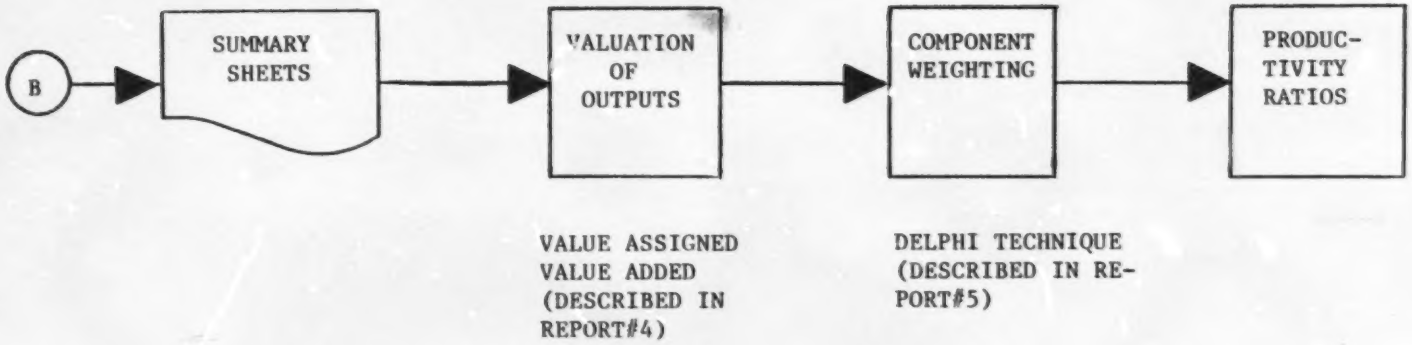


Exhibit 3
Page 3 of 3

PREPARATION OF STEP-DOWN ALLOCATION SHEET

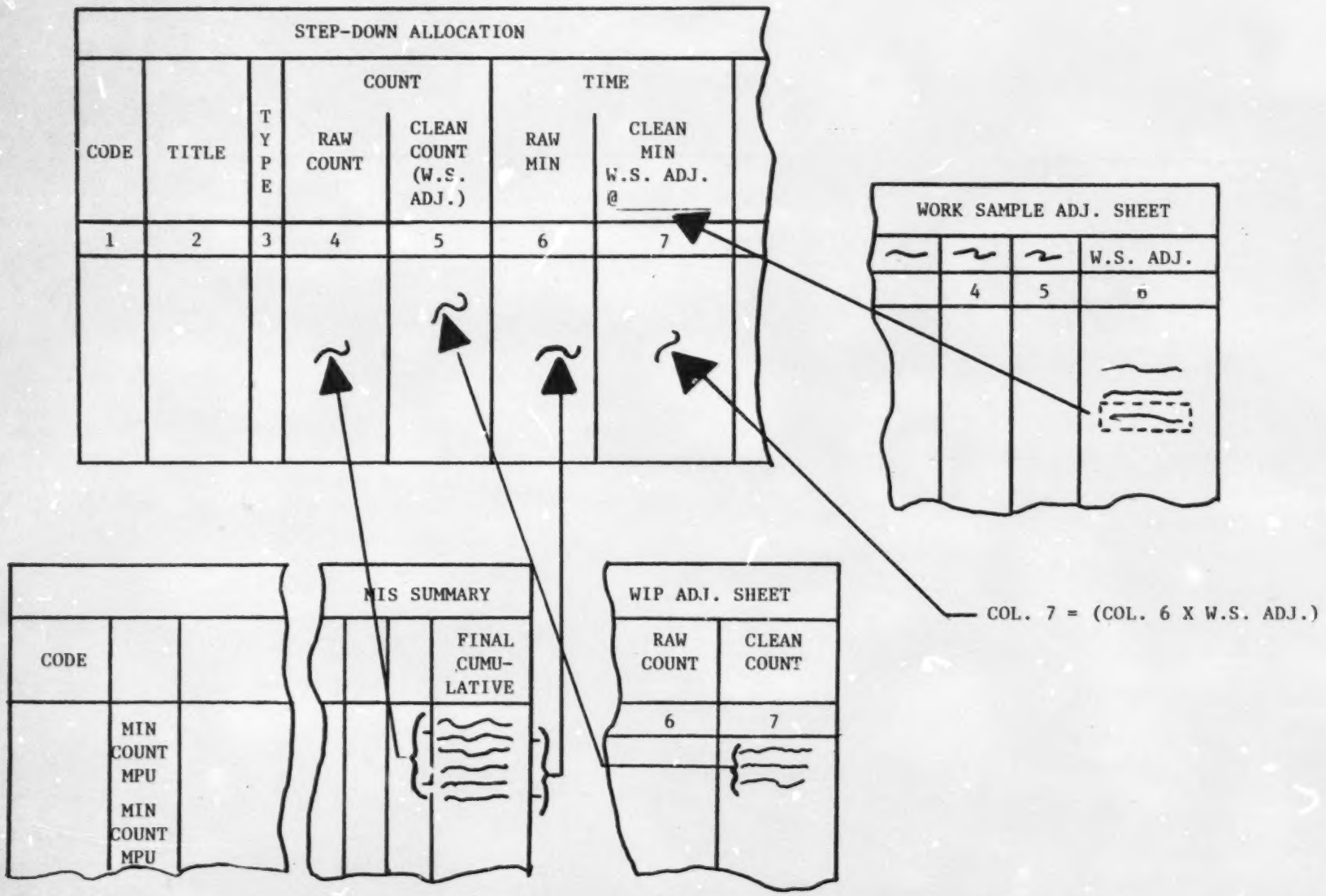


Exhibit 4

EMPLOYMENT SERVICE PRODUCTIVITY MEASUREMENT SYSTEM

STEP-DOWN ALLOCATION-PART I: ALLOCATION OF DIRECT SUPPORT

ORGANIZATION_____ PERIOD _____ BY _____

PRODUCT CODES		TYPE	COUNT		TIME		DIRECT SUPPORT ALLOCATION					SUB TOTAL MIN
CODE	TITLE			CLEAN COUNT WS ADJ	RAW MIN	CLEAN MIN WS ADJ						
1	2	3	4	5	6	7	8	9	10	11	12	13

ORGANIZATION _____ PERIOD _____

TYPE	FREQ OF OCCUR.	SECONDARY PRODUCT CODE ALLOCATION													
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

PART III: MASTER PRODUCT

_____ BY _____

			SUMMARY			
			TOTAL MIN	CLEAN COUNT	MPU	CODE
30	31	32	33	34	35	36

Exhibit 6

PRODUCT TIME SUMMARY

CODE	
ACTIVITY	
ORGANIZATION	

CODE	TITLE	TOTAL MINUTES	PRODUCTION COUNT	RATIO	BASIS FOR ALLOCATION		RATIO

PREPARED BY	PRIMARY RATIO
DATE	WORK SAMPLING ADJUSTMENT
	PRODUCTIVITY RATIO

| ACTIVITY / EMP. CHARACTERISTIC | EMPOLYER PROCESS | | |

| ACTIVITY / APPLICANT CHARACTERISTIC | APPLICANT PROCESS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | JOB MATCHING | | | | | | | | | | | | | | | | | | |

CLIENT SPECIFIC LABOR MARKET AREA FUNCTIONS

INPUTS	OUTPUTS				VALUE ADDED FACTORS				
ACTIVITY	OUTPUT UNIT	TABLE	CELL	DESCRIPTION	TABLE	CELL	DESCRIPTION	POINTS	
INTAKE	APPLICANTS REGISTERED	11	11010D	NEW REGIS.	11	11010D	NEW REGIS.	2	
		11	11015D	NEW PARTIALS	11	11015D	NEW PARTIALS	1	
		11	11020D	RENEWALS	11	11020D	RENEWALS	0	
					6	06090D	HIGHEST GRD.	-	
					6	06095D	0-7	2	
					6	06100D	8-11	1	
					6	06105D	12	1	
					6	06110D	OVER 12	0	
					6	06165D	ETHNIC GROUP	-	
					6	06170D	WHITE	0	
					6	06175D	BLACK	1	
					6	06180D	AM. IND.	1	
					6	06190D	OTHER	0	
					6	06200D	SPANISH AM.	1	

MULTIPLIER

VALUE ADDED REANGES

RANGE	POINTS
0-1.5	.25
1.6-3.0	.50
3.1-4.5	.75
4.6-6.0	1.00

Exhibit 9

As a first step in establishing the value for specific ES treatments, we have identified characteristics of the applicant or employer which:

-make that specific treatment more necessary (i.e., add a greater value to the client)

-make the application of that treatment more difficult.

Exhibits 7 and 8 show a matrix of characteristics to be utilized in the valuation process. In the process it is noteworthy that characteristics data for applicants is readily available through ESARS, however, for the employer no data is currently available. During the study period a questionnaire will be utilized to collect data concerning the characteristics of the employers served.

The characteristics of the client served, either applicant or employer, will be the basis of establishing the value. For example, counseling activities for highly educated applicants will be less valuable than those for those at a lower level of education. A typical worksheet for intake activities is shown in Exhibit 9. The characteristics of applicants who register serves as a basis for a multiplier. This multiplier ranges between 0 and 1. If the characteristics of the registrants is such that the multiplier is one, then the full value is allowed for outreach activities. If the multiplier is less than one, somewhat less value is allowed for outreach activities.

Exhibit 9 shows as well the ESARS cells from which the multiplier can be calculated. In the study characteristics will be collected for all applicants processed in the subject office, not by individual. Thus, the most appropriate ESARS reports will be utilized and the points allowed for specific characteristics will be devided by the total applicants on the report.

The individual productivity ratios and the composite ratios will be calculated. The composite ratio is based on the weighting of the four component parts, applicant, employer, job matching and other legislatively mandated programs. These weights are established based on the emphasis desirable by USES in each area.

6. Report Results

After completion of the pilot studies, meetings will be conducted with the ES Director and staff to discuss the results and to express the appreciation for their cooperation and assistance. A formal summary report will be prepared which outlines the results and identifies the significant points of the study.

APPENDIX G

COMMENTS

BY

DR. FRED ENGLANDER

The following are comments by Dr. Fred Englander, Assistant Professor of Economics at St. Peters College and Research Economist for the New Jersey Department of Labor and Industry, who reviewed the Productivity Measurement System concepts during and following the pilot test phase. His remarks are carried with only minor editorial changes. His comments include discussions of two topics. The first concerns needed areas of research.

The use of a regression methodology to estimate the impact of the various treatment or service outputs on the final value added does provide a more objective means of evaluating the relative economic continuation of final placements and the support services that often lead to placements. Also, the collapsing of the different input and activity codes should make the PMS much more attractive.

With respect to the formulation of the dependent variables, further modifications, to the extent feasibile, are advisable. The PMS should make a maximum effort to have the values added reflect true economic values rather than modified economic values which in turn must be weighted by USES administrators. To the extent that the true economic values of the various ES activities can be determined, these values could be summed in order to calculate the numerator of the performance index for an agency. The relative weighting of ES activities by USES administrators necessarily introduces a subjective element which should be avoided whenever possible.

Though it may be true that the difference in wages before and after placement is a reasonable proxy for the total value added to the applicants when making interstate comparisons, it would be highly fortuitous if the weights chosen by the USES for the four basic output categories reflected the relative economic values of those four output categories.

Hence, a state agency responding to its economic environment by concentrating, for example, on applicant process outputs, would receive unsufficient credit (and funding) if the weight given to the applicant process outputs relative to the other output categories did not reflect the true economic value of the Applicant Process Outputs relative to the other outputs. Frey correctly identifies the increase in duration of employment,

the decrease in quits and the reduction in search costs as the other elements in the value added to the applicant by the ES. If I were to take a semi-educated guess as to which of these sources of economic value added provided to applicants was most important under typical conditions, I would opt for the reduction in the duration of unemployment. To the extent that the services of the various state agencies may have a different emphasis in reducing the duration of unemployment relative to increasing earnings capacity, it does not seem appropriate to use the former as a proxy for the former and the latter as well as the values generated by reducing quits and search costs for applicants.

To the extent that it is possible, I would think it appropriate to at least develop separate regression models using the value added from reducing the duration of unemployment as a dependent variable in one model and the enhanced earnings capacity, as a dependent variable in a second equation. If the PMS were to become operational, it would be worthwhile to estimate prediction equations for the "decrease in quits" and the "reduction in applicant search costs" values added.

Regarding the enhanced earnings capacity dependent variable, it is correct, as you indicate, that the starting wage may not be representative, particularly (as Gary Becker [1/] points out in Human Capital) if the applicant's new job involves a training period. A comprehensive follow-up study to determine the increased present discounted value of the extra earnings resulting from placement would be the ideal method of measuring this value added item, but a second best technique may be to use established age earnings profiles for different occupations, demographic characteristics, etc., in order to estimate value added. An example of how such a technique might be applied is given in Chapter VIII of the Berkowitz and Anderson report on PADEC. This technique might even provide direct estimates of value added (in terms of enhanced earnings capacity) on an ongoing basis which may eliminate the need to

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1/ Becker, Gary, Human Capital, 2nd Ed., New York City: Columbia University Press, 1975.

"predict" value added through the regression equation for those actually placed by ES. The prediction equation would still be useful, however, for estimating the impact on enhanced earnings capacity of such intermediate outputs as counseling, testing, referrals, etc.

Turning to the dependent variable for value added to employers, I believe that the reduction in personnel costs and private placement agency costs is appropriate. If the PMS becomes operational, the other dependent variables affecting value added (such as reduced turnover costs, less overtime costs, and reduced waste due to bottlenecks) should also be estimated in regression equations. Again, I believe that assuming a relatively equal proportional value to employers of these other ES services to the dependent variable that you are using is a very crude assumption.

Once again, if good estimates of true economic values are available, it should not be necessary to rely on the USES to establish a weighting for the various outputs. Moreover, estimating the true economic values of the various ES outputs should have considerable utility in policy questions relating to the overall directions of the ES.

My bias against a USES weighting scheme does not preclude the existence of at least some subjective weights. In particular, it will be difficult to evaluate the value added as a result of legislatively mandated outputs. In the event that the weighting scheme is maintained for the other output categories, I believe that the USES should at least consider certain guidelines (perhaps expressed in terms of minimum or maximum allowable ratios between final outputs and intermediate outputs) to prevent, for example, the inefficient office or agency which is not able to make an adequate number of placements as a result of poor internal organization or procedures from maintaining itself by providing gratuitous intermediate outputs to applicants who would receive a negligible benefit.

A good job has been done in enumerating the independent characteristics variables to be considered in the regression models to predict enhanced earnings capacity and lower personnel and placement agency costs.

In estimating enhanced earnings capacity, consider variables for race, willingness to change occupations, work experience, previous wage (as a measure of applicant expectations and suitability of the applicant to ES services), the employment status and income level of other family members, and asset income and wealth (especially liquid assets). The occupational classification variable might be related in some way to industrial mix in order to guage the relative mismatch between labor supply and demand. In making interoffice or interagency comparisons, it would also be adviseable to standardize for the level of demand (as measured by lay-offs, job vacancies or the rate of growth in employment), employer concentration and the availability and fees of private placement agencies.

It is not appropriate for the prediction equations for values added to included variables to measure agency costs or unit service times. The relationship between output and inputs is given ultimately in the performance index. Inputs are given in the denominator of the performance index. The index should not be biased by making inputs also a determinant of the numerator.

In estimating the dependent variable(s) for value added to the employer, you may want to consider an independent variable to measure the labor intensity of the firm's production function. Presumably, the less labor intensive the production process, the more disadvantaged the firm would be as a result of an unfilled vacancy. I would also be interested to see a dummy variable to account for whether the firm is under any affirmative action pressure. Perhaps the ES office would accomodate a verbal request for black or female applicants. The industry mix variable might be related

to the occupational composition of the applicant pool. Once again, this would be to guage the magnitude of the mismatch between labor supply and demand.

In developing your model(s) simply to predict value added, the large number of independent variables, even if there is co-linearity among them, does not hurt the predictive value of the model(s) as a whole. However, a large number of explanatory variables generally suggests the advisability of using a larger sample size in order to maintain a reasonable number of statistical degrees of freedom. If, as you indicate, the model is also to be used for trying to determine the proper coefficients and significance of certain of the explanatory variables (which as I stated above is a good idea in the case of the treatment variables), then you would want to reduce the number of independent variables in order to avoid co-linearity among them.